

UNIVERSITY OF WASHINGTON DEPARTMENT OF OCEANOGRAPHY Seattle, Washington 98105

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Technical Report No. 250
PHYSICAL, CHEMICAL, AND PRODUCTIVITY DATA FROM AN INVESTIGATION
OF THE NORTHEASTERN TROPICAL PACIFIC OCEAN.
RV Thomas G. Thompson Cruise 026 (PONCHO):
3 January - 14 March 1968
National Science Foundation Grant No. GA 644 Grant No. GB 7394 Office of Naval Research Contract Nonr-477(37) Project NR 083 012 Reference M68-86 February 2971 February 2971 Principal Investigators: F. A. Richards R. C. Dugdale M. L. Healy
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ABSTRACT

This report contains the tabulated physical, chemical, and biological data obtained in the northesstern tropical Pacific Ocean during January, February, and March 1968 during Cruise 026 of RV Thomas G. Thompson. Designated PONCHO, the cruise was undertaken to investigate the effects of chemical properties on biological and physical processes in a nutrient rich area. The various observations, and methods of collection, and analyses are described.

ACKNOWLEDGEMENTS

Special thanks are given to Mr. James J. Anderson for editing the hydrographic data, to Mrs. Jame MacIsaac Dugdale for editing the biological data and narrative, and to Mr. Don Doyle for his help in the compilation of this report.

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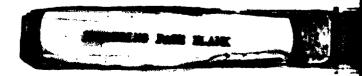
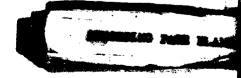


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INTRODUCTION

The PONCHO Cruise was planned to extend the investigations by the Chemical Oceanography group of the chemistry of low-oxygen environments into oceanic waters and to continue studies on nutrient circulation and productivity relationships in the Northeast Tropical Pacific Ocean. The area chosen for the investigations, the waters off Mexico and Central America, is characterized by an extensive layer of low-oxygen water and a wide range in primary productivity levels. The cruise track, Figure 1, was determined by the requirements of the five major projects: (1) Chemistry of Rising Waters, (2) Chemistry of Trench Waters, (3) Chemistry of Oxygen-Deficient Waters, (4) Origin and Fate of Secondary Nitrite Peak and (5) Nutrient-Productivity Studies. The Costa Rica Dome was studied intensively as a region of upwelling, the Mexico Trench was sampled frequently, sections were made south of Acapulco to identify and follow the development of the low-oxygen and core of high-nitrite water, and productivity measurements were made once daily.

The cruise track was made up of four legs, each terminating at a port. The ranges of each leg are outlined below.

CRUISE LEG	DATES	FULL STATIONS	STD STATIONS	TOTAL MILES
Seattle-Acapulco	3 Jan - 17 Jan	9	5	2670
Acapulco-Puntarenas	20 Jan - 6 Feb	31		2288
Puntarenas-Acapulco	10 Feb - 27 Feb	35		2903
Acapulco-Seattle	1 Mar - 14 Mar	3	5	2660

Emphasis was placed upon rapid reduction and analysis of the cruise data, and extensive use was made of the shipboard IBM 1130 Computer

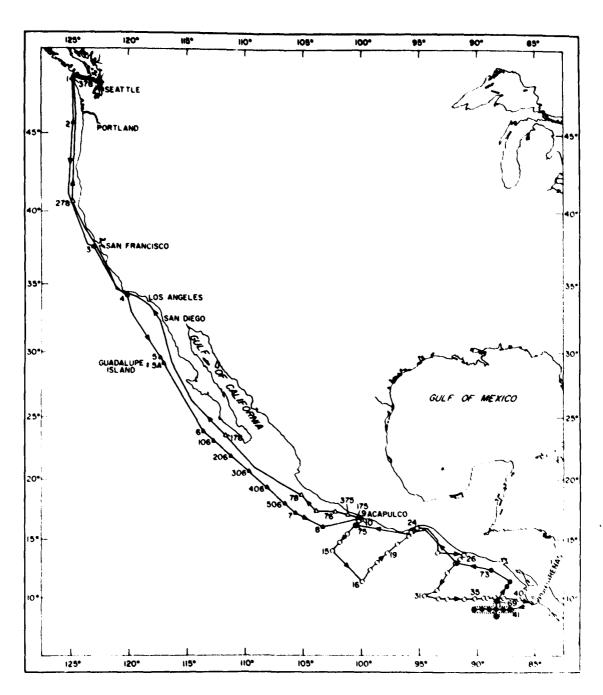


Fig. 1. Thomas Q. Thompson Cruise C26, 3 January - 1h March 1968. (△ - Leg I, O-Leg II, ⊙ - Leg III, △-Leg IV.)

and Calcomp plotter. A short course in Fortran programing was conducted on Leg 1 and considerable programming was accomplished onboard by the computer staff and scientific personnel. Routine calculations and a preliminary Chemistry Edit List of the variables measured were made with the computer, usually within 6-12 hours after the end of a station. In addition to this printed output, vertical plots of selected variables and sections were produced on the plotter. Paper tapes punched during routine lowerings of the Bisset-Berman STD unit were read, listed, and plotted by computer.

METHODS

equipped with reversing thermometers. Large volume samples were collected with 50-liter Pheobe bottles made of P.V.C. and with a 60-liter teflon-lined Bodman sampler made of metal. Sampling depths were determined from wire angle and unprotected reversing thermometer readings. Standard water drawing procedures were used for all chemical samples except pH and micro-0₂. pH samples were collected in citrate bottles normally used for salinity. The water was drawn using Winkler oxygen procedure except that CO₂ samples were sealed with a small bubble to allow for water expansion. Micro-0₂ samples were drawn first using a 25 ml syringe to reduce 0₂ contamination. A listing of analytical methods, all performed at sea, and their references follows.

A number of parameters were determined routinely throughout the water column at every station. Salinity was measured with a Bissett-Berman STD and with the University of Washington salinometer (Paquette,

1958). Phosphate was determined by the method of Murphy and Riley (1962), and silicate by that of Mullin and Riley (1955). Mitrate, nitrite, and ammonia were analyzed respectively with the methods of Wood et al. (1967), Bendschneider and Robinson (1952) and Richards and Kletsch (1964) or for productivity work, Prochasková (1964).

In the oxygen-minimum sone, attention was devoted to careful definition of the sone by precise oxygen determinations. The dissolved oxygen content of waters containing less than 1 ml/1 was determined colorimetrically according to the procedure of Broenkow and Cline (1968). In all other waters, the conventional Winkler analysis was used.

Total CO₂ was determined by gas chromatography, using a Fisher gas partitioner, Model 29 equipped with an external gas stripper modified from the design of Swinnerton et al. (1962). Alkalinity was measured by the technique of Strickland and Parsons (1968). pH was measured by an unpublished method.

The routine hydrographic data are on file at the National Oceanographic Data Center and at the University of Washington.

EXPLANATION OF DATA TABLES

The information in the data tables was transcribed directly from IBM cards. The codes used to describe weather, sea conditions, etc., can be found in NODC Publication M-2 (National Oceanographic Data Center, 1964), and the abbreviations and column headings are described below.

Abbreviations and Headings Used in Data Tables

DATE Expressed as Greenwich day/month/year.

HOUR Greenwich mean time to the nearest tenth of

an hour of the messenger drop on the first

cast

LAT Latitude and longitude in degrees and minutes;

LONG or in degrees, minutes, and tenths of minutes

BARO In millibars (To obtain barometric pressure,

add 900 if this number is above 50 and 1000

if below 50.)

TEMP DRY In degrees Celsius

and TEMP WET

REL HUMID Relative humidity expressed in percent

WEATHER State of present weather (Coded in accordance

with WMO Code 4501). A preceding X has no significance except to avoid confusion with previously used two-digit codes.)

VISIBILITY Range of visibility (WMO code 4300)

CLOUD TYPE Cloud type (WMO code 0500)

CLOUD AMT Amount of cloud cover (WMO code 2700)

WIND VELOC Wind velocity in knots

WIND DIREC Wind direction

(from NODC Publication M-2)

WAVE DIREC Direction from which dominant waves approached

(from NODC Publication M-2)

WAVE HEIGHT Height of dominant waves (WMO code 1555)

WAVE PERIOD

Period of dominant waves (WMO code 3155)

SECCHI

Depth in meters to which a 12-inch (30.5 cm) Secchi disk could be seen on daylight stations

SOUNDING

Depth of water in meters in the station as determined by the ship's echo sounder

CAST

Cast number

DEPTH

Depth in meters from which sample was obtained

TEMP

Temperature in degrees Celsius

SAL.

Salinity in parts per thousand (*/..)

SIGMA-T

An expression for the density of seawater at atmospheric pressure at the indicated temperature and salinity (To convert sigma-t values to density, divide by 1000 and add 1; thus, sigma-t 22.42 = density 1.02242)

02 (Dissolved oxygen)

UGAT/L

In microgram-atoms per liter, by the Winkler method in the first column, and by the micro method in the second.

UOA

Apparent oxygen utilization in microgram-atoms

per liter (µgm-atoms/liter)

SATN

Percent of oxygen saturation

P04

Reactive phosphorus in microgram-atoms per

liter (µg-atoms/liter)

NO3

Nitrate-nitrogen in microgram-atoms per liter

(µg-atoms/liter)

SI04

Reactive-silicate in microgram-atoms per liter

(µg-atoms/liter)

NO2

Nitrite-nitrogen in microgram-atoms per liter

(µg-atoms/liter)

рH

pH corrected for in situ temperature

ALK

Alkalinity in millequivalents per liter

NH3

Ammonia-nitrogen in microgram-atoms per liter

(µg-atoms/liter)

CO2

Total carbon dioxide as determined directly by gas chromatography in millimoles per liter (mmole/liter)

* AND •

Indicate questionable values

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 chromatography. Anal. Chem. 34:483-485.
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 1967. Determination of nitrate in sea water by cadmium-copper reduction
 to nitrite. J. Marine Biol. Assoc. U. K., 47:23-31.

PHYSICAL AND CHEMICAL DATA

36

		NO2 UGAT/L					
		NO3 UGAT/L	7.61	7.61	3.91	25.00	30.78
	WAVE PERIOD 2 SECCHI 13 SOUNDING 630	\$104 UGAT/L	10.42	9.54	69.9	32.50	51.45
	SECONDI SOUNDI	PO4 UGAT/L					
VALUES	000 000 000 000 000 000 000 000 000 00	0/0 02 SATN					
OBSERVED VALUES	WIND VELOC 14 WIND DIREC 03 WAVE DIREC 34 MAVE HEIGHT 4	AOU UGAT/L	-5	7	-5	276	300
200 ₹	×	02 UGAT/L					
STATION 302	3>UU	02 UGAT/L	267	996	267	302	108
CRU1SE 326	1030•4 9•2 7•7 10 82	SIGMAT	25.05	25.05	25.06	25.28	26.45
	BARO 103 TEMP DRY TEMP WET REL HUMID	SAL 0/00	32.415	32.413	32.420	32.499	33.677
T G THOMPSON		TEMP DEG.C	64.6	67.6	9.38	8.38	69.65
	DATE 05/01/68 HOUR 45-33-5N LONG 124-45-5E	DEРТН	6	10	52	001	251
	PATE LONG	CAST	-	7	~		-

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		Ą	8.37	8.37	8.36	8.27	8.15
		NO2 UGAT/L					
		NO3 UGAT7L	4.83	4.83	4.92	18.07	20.97
	MAVE PERIOD 2 SECCHI SOUNDING 100	S104 UGAT/L	5.65	6.27	6.78	21.71	25.98
	SECCH SOUNDI	PO4 UGAT/L	0.58	09.0	09.0	1.54	1.62
VALUES	0000 TH 00000	0/0 02 SATN	100	100	100	49	57
OBSERVED VALUES	WIND VERNO V	AOU UGAT/L	-	-1	0	199	241
N 003	× × × × × × × × × × × × × × × × × × ×	02 UGAT/L					
STATION 003	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	530	531	535	349	314
101SE 026	2.85 2.95 2.85 2.85	SIGMAT	25.41	25.42	25.42	25.81	26.00
T G THOMPSON CRUISE	BARO 1023.5 TEMP DRY 8.9 TEMP WET 7.7 REL HUMID 85	SAL 0/00	33.417	33.423	33.422	33.600	33.699
1 G THO		TEMP DEG.C	11.84	11.80	11.82	10,39	9.75
	DATE 07/01/69 HOUR 22.2 LAT 37-32.5N LONG 122-56.0W	DEPTH		01	11	29	89
	DATE LOUR LONG 1	CAST	~ 4	٦	-	-	-

		T G THO) NOSdW	T G THOMPSON CRUISE 026	STATION 003	OBSERVED VALUES
CAST	CAST DEPTH	NH3 UGAT/L	ALK MEG/L	CO2 MMOL/L		
~			2.38			
-	01		2.36			
-	11		2.39			
7	59		2.38			
-	89		2.44			

															-1
		ā		8.39	8.37				8.05			1	7.75	7.72	
		NO2	USAT/L	0.05	0.12	0.12		50.0	0.02	0.62	0.02		70.0	2000	0.02
		NO.	JVI 450	0.19	1.73	1.52		61.41	21.70	21.91	31.41		10.07	16.66	16.83
	WAVE PERIOD 2 SECCHI SOUNDING 571	9010	06A17L	2.76	3.39	3.61	14. 64	1	27.36	27.74	54.84	101	60.	119.73	118.85
	SECCH	P04	1 0	0 0	0.51	0.45	0.40		56•1	1.86	2.73	3.40	9 6	06.6	** 05
VALUES	1886 1987 1988 1988	070 02		o ,							18	m		•	2
OBSERVED VALUES	TOOK WWGG KEKE	AOU	0.41	} `	;	31	154		672	583	473	578	567		583
STATION 004	X X X X X X X X X X X X X X X X X X X	02 UGA 177													
	WEATHER VISIBILI CLOUD TY	02 UGAT/L	554	523	•	520	387	261		607	103	19	31	•	3
RU1SE 026	1020.0 12.9 10.8 D 77	SIGMAT	25.06	25.12		25.12	25.64	26.13	24-14	•	26.63	26.92	26.93	36 96	
T G THOMPSON CRUISE	BARO 10 TEMP DRY TEMP WET REL HUMID	SAL 0700	33.386	33,383	200	33.385	33.492	33.894	33.880		HCT **6	34.250	34.253	34.256	
1 G 1H		TEMP DEG.C	13.51	13.22		77061	10.98	9.82	9.83		000	9999	6.39	6.40	
	34-13-36 120-32-68	DEPTH	-	25	36	0	76	151	152	202	700	503	568	569	
	HOAT LOATE NOT RE	CAST			-	•	-	-4	H	-	• •	-	-	-	

ALUES	
OBSERVED VALUES	
STATION 004	
CRUISE 026	Ş
T G THOMPSON	3
٠ ١	7
	FOTH

C02										
ALK MEG/L	2.38	2.28			2.38			2.47	2.47	
NH3 UGAT/L							0000	90•0	1.06	16.0
ОЕРТН	-	52	92	76	151	152	302	503	568	560
CAST	~	-	-	7	-	-	-	~	~	_

		g I	04.0	8.43	8.40	8.40	8.38	8.30	6.07	7.94		7.78
		NO2 UGATZE	0.01	000	00.0	00.0	0.07	0.02	0000	00.40		0000
		NO3 USATVI	00.0	0.01	00.00	20.0	0.52	8.68	26.93	31.98	•	41.43
	PER 100 34 11 NG 519	\$104 USAT/L	88° O	0.75	0.88	0.38	2.89	8.03	30.75	51.08	1	78.44
	SECONI SOUNDI	P04 UGAT/L	0.31	0.26	0.24	0.25	0.37	06.0	1.84	2.49		3.12
VALUES	1 2 2 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0/0 02 SAT*	104	104	105	104	103	98	67	92		ς.
OBSERVED VALUES	KEEE AALDO COOL COOL COOL COOL COOL COOL COOL C	AOU	-17	-20	-21	+18	-16	7.	787	427		571
S7AT10% 005	> \(\times \)	92 UGA 17L										
	WEATHER VISIBILIT CLOUD TYP	32 UGAT/L	200	503	503	200	516	461	278	154		59
PUISE 026	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SIGMAT	24.55	54.55	24.55	54.55	24.30	25.41	26.47	26.68		27.02
T G THOMPSON CRUISE	BARO 10 TEMP DRY TEMP HET REL HUMID	SAL	33.605	33.601	33.603	33.594	33.410	33,333	34.151	34.148		34.333
7 G TH		TEWP DEG.C	16.62	16.62	16.64	16.62	14.85	11.50	9.03	7.64	6.74	6.25
	10/01/68 17-3 29-32-0N 117-16-0W	DEPTH		CT	50	04	5	101	201	302	403	514
	108 108 108 108 108 108 108 108 108 108	CAST	-	7	~	-	-	-	~	-	-	-

		9	NOSA	I G INUMPSON CRUISE 026	STATION 005	OBSERVED VALUES	VALUES
CAST	DEPTH	NH3 UGAT/L	ALK MEG/L	C05			
-	~	0.93					
-	20	0.81					
~	50	0.15					
-	04	0.40					
~	02	0.58					
-	101	0.37					
~	201	1.01					
~	302	0.11					
-	403						
-	514	0.13					

		ā		8.42	8.43	8.42	8.35	7.82
		NOZ	UGATZL	0.17	00.0	90.0	0.38	90°C
		NO3	UGAT/L	0.03	0.03	0.16	1.88	30.03
	MAVE PERIOD 2 SECCHI SOUNDING 3242	\$104	UGAT/L	1.00	1.38	0.25	4.02	78.06
	SECCH	400	06A17L	0.31	0.32	0.31	66.0	3.17
VALUES	REC 02	20 0/0		701	101	101) r	n
OBSERVED VALUES	EXIND VELVORENCE DIRECT STREET	AOU	1	9 6	Դ 42) 1) a	4 4	>
STATION 006	74 ×1	02 UGAT 7.1						
	WEATHER X VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	777	[77	7 7 7	643	15	
RU1SE 026	100°0 17°1 17°5	SIGMAT	23.96	23.96	23.97	24.89	27.08	
T G THOMPSON CRUISE	MARO 1019.0 TEMP DRY 20.1 TEMP WET 17.5 REL HUMID 777	SAL 0700	34.504	34.492	34.499	33.732	34.487	
± 0 +		TEMP DEG.C	21.66	21.60	21.60	15.57	69.9	
	12/01/68 17-5 17-5 113-30-0W	ОЕРТН	~	10	25	76	7 09	
•	CONC.	CAST	-	-	-	-	-	

		ž o -	NOSANO	T G THOMPSON CRUISE 026	STATION 006	OBSERVED VALUES
CAST	DEPTH	NH3 UGAT/L	ALK MEG/L	202		
~	-	0.75				
-	10	0.39				
~	52	0.15				
	92	00.00				
-	409	00.0				

			_			~			_				. ~	. ~			. ~	,			•	
		ď	A.2A			8.27	;		7.87	:		7.7.7	7.70	7.67	7.67	7.62	7.60				7447	
		N02	0-22	0-11		C.15	2002	6.79	0.07		0471	2.58	26.35	1.63	0.62	44.0	0.07	10-0	10-0	10.0	0000	1000
		NO3	0.75	0.14		2.50	2.05	5.27	23.63		25.38	23.50	22.93	23.47	27.92	32.51	36.57	41.88	43.77	43.65	41.47	41.39
	ER 10D 2	S104 UGAT7E	88	88		0.63	1.25	5.52	17.32	•	29.24	33.51	35.64	40.41	52.46	68.59	74.17	92.37	107.55	122.99	128,39	142.32
	WAVE PERTOD SECCHI SOUNDING 3	P04 UGA17L	5.26	0.23		5.17	0.28	0.87	1.98		2.60	2.64	2.70	2.86	3.07	3.26	3.36	3.43	3.50	3.32	3.29	3.11
VALUES	00 ECC 005 3013	0/0 02 SATA	102	102		102		1,1	23		m	2	4	m	•	2	4	2	œ	6 0	14	22
OBSERVED VALUES	WIND VELOC WIND DIREC WAVE DIREC	AOU UGAT7L	-1	-5		æ I		131	376		164	513	509	521	545	999	695	597	576	583	557	512
200	× ⊶0.∞∞	02 UGAT/L						114.96	78.41		0.34	0.85	1.19	0.51	1.02	1.19	1.61	2.63	18.70	41.44		
STATIO	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	416	414		417	425	324	111		16	11	2.1	18	15	6	2.1	13	20	24	68	144
CRUISE 026	4250	SIGMAT	22.27	22.28		22.27		24.42	25.42		26.25	26.43	26.52	26.63	26.83	56.99	27.11	27.27	27.42	27.50	27.56	27.65
THOMPSON CR	MP DRY 24 MP BET 21 L HUMID	SAL 0/00	34.008	34.014		34.009	34.277	34.344	34.461		34.776	34.784	34.761	34.714	34.624	34.572	34.551	34.533	34.561	34.580	34.595	34.633
T G THO	& H H G	TEMP DEG.C	26.13	26.10	26.09	26.11		19.48	15.70	15.56	12.96	12.03	11.48	10.68	9.10	7.79	6.80	5.45	4.39	3.75	3.21	2.59
	15/01/68 14.5 17-08.0N 105-39.0W	DEPTH	0	10	11	25	50	25	100	101	150	201	246	762	394	567	294	795	166	1199	1404	1706
	OATE HOUR LAT	CAST	7	-	7		-	-	-	-	-	-	~	7	7	7	~	~	7	7	~	2

		T G THO	MPSON CI	T G THOMPSON CRUISE 026	STATION 007	70	OBSERVED VALUES
CAST	DEPTH	NH3 UGAT/L	ALK MEG/L	C02			
-	0	00.00	2.46	2.01			
-	01	0.13					
-	::						
~	25	0.27	2.40	2.02			
~	8	0.48					
-	75	0.62					
-	100	0.26	2.42	2.31			
-	101						
-	150						
-	201		2.48	2.33			
7	942	00.0	2.43	2.41			
2	567		2.44	2.41			
7	394		2.44	2.49			
7	495	00.0	2.44	2.45			
~	594		2.44	2.48			
7	795	0.15					
~	166			2.52			
~	1199	0.01					
~	1404		5.49	2.54			
8	1706	0.15					

		ğ	8.04		8.03		7.60	7.53		7.44	7.44	7.43	7.40	7.40	7.46				7.41	
		NG2 UGAT/L	00.0	90.0	0.02	0.01	0.71	90.0	2.02	1.84	1.92	1.56	69.0	0.57	0.03	0.02	0.01	00.0	0.01	0.01
		NO3 UGAT/L	0.05	00.0	0.07	0.03	6.63	25.95	25.52	25.66	54.99	23.58	29.16	31.58	37.45	41.83	43.77	45.94	41.46	41.38
	ER 100 43	SIO4 UGAT7L	1.25	6.75	0.75	1.38	9.16	20.33	29.54	33.13	34.76	39.53	51.96	92.49	75.93	91.49	107.68	125.25	136.29	145.58
	WAVE PERIOD SECCHI SOUNDING	P04 UGAT/L	0.16	0.16	C-15	0.19	1.17	2 • 30	2.59	2.65	2.78	2.81	3.05	3.19	3.41	3.41	3.49	3.36	3.23	3.08
VALUES	000 ECC 003 GHT 345 245	0/0 02 SATN	104	104	104		57	10	2	6	7	8	7	2	7	8	S	10	15	23
OBSERVED VALUES	WWEIND VERY SAVE DIRE	ACU UGAT/L	-15	-15	-14		194	777	504	515	520	528	548	595	581	665	593	577	255	508
900	⊶0,00⊶	02 UGAT/L					111.01	32.38	0.89	2.42	0.68	1.23	1.87	1.36	0.85	2.89	12.45	36.00		
STATION 008	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	413	414	412	418	292	61	11	15	12	12	11	11	11	11	32	61	96	148
E 026	255. 505. 500. 500. 500. 500. 500. 500.	SIGMAT	21.12	21.75	21.75		24.50	55.59	26.29	56.49	26.55	76.64	26.83	56.99	27.13	27.28	27.40	27.50	27.58	27.64
	BARO 101 TEMP DRY 2 TEMP WET 2 REL HUMID	SAL 0/00	33.989	33.985	33.986	34.264	34.384	34.576	34.796	34.784	34.763	34.724	34.633	34.583	34.553	34.554	34.558	34.579	34.599	34.626
T G THOMPSON	⊕⊢⊢ ∝	TEMP DEG.C	27.81	27.72	27.75		19.27	15.32	12.82	11.74	11.31	10.66	9.10	7.85	6.72	5.50	4.51	3.70	3.12	2.59
	16/01/66 13-6 16-05-0N 103-22-0W	ОЕРТН	0	10	25	20	76	101	151	201	35 2	867	397	164	969	197	1000	1202	1405	1707
	CL HO O HOUTE O N HOUTE	CAST	7	7	7	8	7	7	7	7	~	~	-	-4	-	~	-	-	-	~

		T 6 TH0	MPSON C	T G THOMPSON CRUISE 026	STATION 008	OBSERVED VALUES	VALUES
CAST	DEPTH	NH3 UGAT/L	ALK MEG/L	C02			
~	0	0.63	2.38	2.14			
~	10	0.25					
~	25	0.29	2.38	2 • 12			
~	20	0.41	2.40	2.18			
7	76	00.0	2.40	2.37			
2	101	0.24	2 • 42	5.49			
2	151	00.00					
8	201	00.0	2.43	2.56			
~	252	00.0	2.43	2.53			
~	862	00.00	2.43	2.54			
	397	0.03	2.43	2.60			
~	497	00.0	2.44	2.61			
-	966	00.0	2.52	2.64			
-	197	0.10					
-	1000	0.23		2.62			
-	1202	90.0					
~	1405	0.53	5.49	2.66			
-	1707	0.23					

	C Z	UGATIL	00.0	0.78	6.02	0.02	C.74	0.23	0.25	68.0	1.18	68.0	0000
		UGAT/L	0.25	12.76	28 • 72	30.82	28.18	30.26	30.34	28.20	25.77	28.70	44.16
WAVE PERIOD 2 SECCHI SOUNDING 924	\$104	UGA T/L	2.76	11.42	25.60	27.48	29.74	30,37	32,88	35.89	45.04	57.48	103.41
SEA SECON SOUTH PUT	40A	UGAT/L	0.25	1.45	2.44	2.43	2.46	2.45	2.55	2.63	2.77	3.04	3•36
VALUES OC 03 346 346	3/0 02	SATA	707	3 (n	,	רי) ו	m (m (7	2 (m .	v
MEND VELOC 03 WAND DIREC 36	ACU	UGA!/L	172	707	n p †		n .	900	110	0 6	260	ש ל מ	746
STATION 009 THER XO IBILITY 8 UD TYPE UD AMT	05	7 / 450		1,82	•			00.4	1.4.1	70.7	7.01		
STATION WEATHER VISIBILITY CLOUD AWT	02	414	198	17		2 4	2 4	7 - 7	• •	; ;	3 6	, c)
BARO RY 26.1 TEMP DRY 26.1 TEMP WET 25.3 REL HUWID 94.	SIGMAT		24.35			26.30	26.39	26.49	26.55	26.69	26.90	27.37	
CARDON 10 CEMP DRY 10 CEL HUKITO	SAL 0/20	34.091	34.470	34.847	34.845	34.836			34.738	34.718	34.627	34.559	
	TEMP DEG.C	27.61	50.09	14.25		12.90	12.38	11.97	11.24	10.34	8.64	4.80	
17/12/68 13.5 16-44.5N	ОЕРТН	0	80	95	118		186					698	
LANG LONG	CAST	-	~	7	7	-	-	-	-	1	~	7	

		CH1 9 1	MPSON CI	T G THOMPSON CRUISE 026	STAT10H 009	OBSERVED VALUES	VALUES
CAST	DEPTH	MH3 UGAT/L	ALK MEG/L	C02			
-	0	2.27					
-	4	0.17					
-	96	99.0					
~	118	0.22					
-	141	00.0					
~	186	60.0					
-	737	1.31					
~	281	0.09					
-	376	77.0					
	471	44.0					
-	840	1.60					

		, · · ·	BEIDED MOSERUM S. A.	920 351061	STATE		CB/ 43585	SECUES					
•	20/01/69 00/8 20/01/69 AT 16-68-01 040 099-56-01		(1) (1) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4		0.00 0 % % % % % % % % % % % % % % % % %		ODE COULT COUNTY OF COUNTY	00000 00000 00001	10 400 400	00 0 0 10 0 10 0 10 0 0 0 0 0 0 0 0 0 0			
154	T du	4 C C C C C C C C C C C C C C C C C C C	400	. * * * * * * * * * * * * * * * * * * *	35.	54.7	45. 5.45.	5/5 5/5	9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2104	15.3 56.77.6	362 JSAT7L	Ţ
	e	27.65	34.055	25.12	244		. 7 7	: 4 : 4			6.14	0.0	0.40
	10	27.34	34.542	21.91	4.83		78-	67 14			64.0	00.0	6.35
	25	26.77	33.952	22.53	457		-52	(e) . 4 . 4			0.19	0.01	
	۲, در	23.15	34.175	63.23	325		122	36			5.73	1.021	
	75	13.61	34.430	24.45	163	132.25	24.7	27			21.04	0.14	80.5
	101	14.36	34.952		4.	4.72	4				() *4 () M	0.0	
	126	13061	740367	26.23	æ	1.73	664	N			29.94	0.02	7.89
	151	12.85	34.94.9	26.32		8.12	653	4			31.19	6.03	
	236	11.94	26.9.72	26.467	(°		7. 7.	13			, ,		

4640 Q

	Ĭ	8.29		7.78		7.75		1.71	7.73		
	N02 UGAT/L	10.0	90.0	0.0	0.27	0.02	0.02	1.18	1.17	0.78	00.0
	NO3 UGAT/L	0.16	12.36	29.46	30.07	31.07	31.16	27.49	26.74	30.91	39.16
PERIOD 2 I ING 2377	S104 UGAT/L	0.63	11.42	23.97	28.24	30.75	33.01	37.90	49.82	63.00	76.43
WAVE PE SECCHI SOUNDIN	PO4 UGAT/L	0.45	1.57	2.62	2.48	2.50	2.55	2.71	3.23	3.11	3.25
VALUES DO 10 SEC 32 SET 32	0/0 02 SATN	105	33	æ	4	2	7	3	2	1	~
OBSERVED VALUES WIND VELOC 32 WAND DIREC 32 WAVE HEIGHT 1	AOU UGAT/L	- 18	599	478	964	510	819	524	545	999	590
[08×6	02 UGA 7.7L			3.23	1.27	1.06	1.10	1.02	0.89	3.02	2.72
STATION WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGA 7.7L	414	144	17	18	11	01	15	11	•	•
CRUISE 026 1011-2 25-2 0 25-85	SIGMAT	21.62	24.06	25.90	26•32	26.43	26.52	56.64	26.82	26.97	27.17
T G THOMPSON CRUISE BARO TEMP DRY 27-2 TEMP MET 25-2 REL HUMID	SAL 0/00	34.004	34.363	34.824	34.841	34.832	34.783	34.739	34.661	34.597	34.563
	TEMP	28.14	20.90	14.78	12.86	12.25	11.56	10.75	9.35	8.06	6.46
21/01/68 2.1 16-33-0N 100-10-5#	DEPTH	0	64	66	149	198	248	562	401	106	649
DATE LATE LONG 1		~	-	-		-	-	~	-4	~	

		Ţ	8.28		7.77		7.74		7.69	7.68			7.63	7.63	7.62	7.62
		NO2 UGAT/L	0.02	98.0	0.05	0.01	60.0	0.07	1.42	1.06	0.68	0.13	0.20	00.00	0.08	90.0
		NO3 UGAT/L	0.19	18.54	30.29	31.93	28.69	28.80	23.89	24.12	32.10	37.69	37.62	41.18	43.12	45.53
	MAVE PERIOD 2 SECCHI SOUNDING 4645	S104 UGAT/L	0.75	11.92	25.23	27.61	59.49	32.88	37.15	46.81	62.25	75.17	78.56	86.72	96.63	102.28
	SECOND IN	P04 UGAT/L	0.19	1.61	2.55	2.50	2.35	2.39	2.54	2.92	3.08	3.98	3.24	3•33	3.30	3.32
VALUES	6600 T 3335 13335	070 02 SATN	106	30	2	2	ж	2	2	2	2	7	-	7	7	4
OBSERVED VALUES	EXE EXAND AVE DOUG TOUG TARE	A00 USAT7L	-21	322	664	507	609	525	929	245	564	585	589	965	603	965
	0 80 0	02 UGAT/L			0.59	1.05		0.55	1.27	0.42	0.42	2.42*	0.55	1.27	90.5	9.56
STATION 012	VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	420	138	6	•	14	6	11	11	11	σ	0	•	13	27
CRUISE 026	0000	SIGMAT	21.83	24.74	26.19	26.35	26.45	26.54	26.62	26.78	56.99	27.16	27.18	12.12	27.34	27.39
	BARO 1013 TEMP DRY 21 TEMP WET 21	SAL 0/00	34.051	34.531	34.942	34.845	34.807	34.778	34.748	34.666	34.593	34.565	34.561	34.557	34.555	34.555
T G THOMPSON	A-1-40	TEMP DEG.C	27.61	18.78	13.48	12.71	12.03	11.47	10.89	65.6	7.87	6.57	6.35	5.65	5.03	4.61
	21/01/68 5.9 16-18-0N 100-25-0N	DEPTH	0	20	101	151	201	252	302	403	503	655	769	794	768	766
	10 A C C C C C C C C C C C C C C C C C C	CAST	-		-	-	-	-	-4	-	-	-	~	~	7	~

	ğ	8.30	7.95	7.76		7.70		1.17		7.70			7.65		7.72
	NO2 UGAT/L	0.01	0.31	1.09	0.14	0.03	0.08	0.41	1.12	0.83	0.71	0.17	00.0	00.00	00.0
	NO3 UGAT/L	0.20	13.01	28.38	21.38*	31.02	31.10	30.10	25.62	28.63	33.00	37.06	40.72	43.11	43.78
WAVE PERIOD 32 SECCHI 3400 SOUNDING 3400	S104 UGAT/L	0.50	11.92	25.98	27.61	31.00	33.13	33.13	43.05	55.97	65.39	76.30	82.20	89.10	97.89
SECOND SE	P04 UGA 172	0.15	1.68	2.48	2.47	2.48	2.54	2.63	2.86	3.12	3.19	3.31	3.35	3.54	3.41
VALUES OFFI OFFI OFFI OFFI OFFI OFFI OFFI OFF	0/0 02 SATN	106	27	-	~	~		7	m	m	~	-	2	~	m
OBSERVED VALUES WIND DIREC 042 WANE DIREC 304 WAVE HEIGHT 1	A00 UGAT/L	-21	337	504	514	519	525	519	531	549	574	584	265	165	603
e 10004	02 UGAT/L			0.08	0.83	0.17	0.21	0.21	0.25	0.51	00.0	1.15	0.81	2.34	7.31
STATION WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	419	125	4	*	•	•	13	15	97	1	•	11	14	18
CRUISE 026 238.5 28.5 81	SIGMAT	21.95	24.80	26.18	26.38	26.45	25.52	26.55	26.71	26.89	27.04	27.14	27.23	27.30	27.37
~ ~	SAL 0/00	34.253	34.518	34.827	34.835	34.805	34.785	34.771	34.699	34.623	34.581	34.560	34.549	34.553	34.558
ت ا	TENP DEG.C	27.72	18.50	13.50	12.53	12.05	11.57	11.35	10.14	8.68	7.48	6.65	5.91	5.40	4.81
21/01/68 18-0 15-26-0N	DEPTH	0	64	44	146	195	243	274	368	463	557	259	748	846	945
LONG LONG LONG	CAST	-	-	~		-		7	~	7	7	7	7	8	~

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'ED VALUES
OBSERVED
STATION 013
CRUISE 026
T G THOMPSON

STA																
CRUISE 026	C02	2.13	2.43	2.47		2.55		2.57		2.61			2.67		2.63	
T G THOMPSON CR	ALK MEG/L	2.41	2.41	2.43		2 • 4 2		2.42		2.44			2.44		2.46	
T G THO	NH3 UGAT/L															
	ОЕРТН	0	6#	16	146	195	243	274	368	463	557	652	748	946	945	
	CAST	~	~	-	-	-	-	~	2	~	~	~	7	~	~	

		Ĭ	8.34	8 • 34			7.80		7.78				7.69			7.71
		NO2 UGAT/L	00.0	0.03	0.15	1.97	0.24	69.0	1.58	0.91	0.78	0.72	0.00	00.0	0.01	00.0
		NO3 UGAT/L	0.26	0.17	30.40	27.72	30.86	29.57	27.26	25.82	30.20	34.84	40.76	41.01	44.11	45.05
	PER 10D 2 ING 3296	SIO4 UGAT/L	1.13	1.38	21.08	28.74	30.87	33.51	35.64	46.81	59.24	71.53	78.44	87.22	93.75	100.27
	SEAVE SECOND SOUND	P04 UGAT/L	0.36	0.17	2.52	2.47	5.69	2.57	2.58	26.2	3.24	3.25	3.35	3.45	3.59	3.65
VALUES	0 3 3 1 2 2 2 3 1 3 1 3 1 3 1 3 1 3 1 3 1	0/0 02 SATA	105	104	-	7	-	-	-	-	7	-	-	o	1	2
OBSERVED VALUES	AANNO AMANANA AMANANANA AMANANA AMANANA AMANANANA AMANANA AMANANA AMANANA AMAN	AOU UGAT/L	-19	-13	478	503	517	524	530	541	563	517	593	909	910	610
M 014	>₩. Öæ×6	02 UGAT/L			0.93	0.08	0.55	1.02	1.02	0.68	0.55	1.02	1.74	2.12	3.70	8.50
STATION 014	WEATHER VISIBILITY CLOUD TYP CLOUD AMI	02 UGAT/L	412	412	•	0	•	4	6	9	•	•	4	-	4	11
CRU1SE 026	11505 1176 2006 2006	SIGMAT	21.42	21.73	25.55	26.24	26.43	26.52	26.57	56.69	26.92	27.06	27.18	27.26	27.32	27.37
	MARO 1011 TEMP DRY 27 TEMP WET 29	SAL 0/00	33.958	33.972	34.733	34.819	34.823	34.786	34.769	34.674	34.609	34.575	34.552	34.552	34.556	34.556
T G THOMPSON		TEMP DEG.C	28.65	27.75	16.03	13.13	12.21	11.61	11.26	10.13	8.47	7.29	6.33	5.71	5.19	4.77
	22/01/68 14-46-0N 101-49-0W	DEPTH	0	90	101	151	102	252	787	380	477	572	699	797	863	096
	40410 #21-60 mar 6	CAST	~	-	-	-	-	~	8	~	~	7	~	7	7	7

		ğ	8.27	8.35		8.32	8.33		8.12	8.04	7.83		7.77		7.78	7.77	7.73		7.76		7.72		7.70	7.68		7.64		7.66		7.72		7.85	7.88
		NO2 UGAT/L	0.02	00.0	0.01	0.0	90.0	1.83	60.0	70.0	60.0	0.37	0.03	0.05	92.0	0.03	0.07	0.35	0.79	1.74	1.32	1.06	68.0	0.48	0.01	0.02	0.02	0.02	0.01	0.01	00.0	0.01	0.01
		NO3 UGAT/L	0.04	0.11	0.13	90.0	0.92		3.52	15.47	53.82*	31.15	32.54	32.10	31.80	31.91	31.99	30.58	29.68	25.88	23.91	28.49	28.74	34.70	39.03	41.50	43.64	44.77	44.83	43.27	60.04	39.07	38.44
	ER 100 2 NG 3200	\$104 UGAT/L	1.51	1.63	0.75	1.76	1.76	1.38	8.16	12.30	23.72	27.48	28.11	27.86	30.37	30.50	31.37	32.88	34.14	37.02	60.09	48.19	54.34	69.69	77.68	83.46	92.74	98.77	110.94	137.80	143.70	150.85	148.34
	WAVE PERIOD SECCHI SOUNDING 3	P04 UGAT/L	0.50	0.25	0.21	0.22	0.31	94.0	1.31	1.63	2.53	2.54	2.47	2.43	2.63	2.54	2.58	2.57	2.72	2.73	2.79	2002	3.12	3.26	3.36	3.51	3.43	3.49	3.45	3.28	3.01	2.81	2.78
VALUES	REC 03	0/0 02 SATN	106	105	105		103		67	67	-		М	9	m	7	2	7	2	7	9	4	2	~	m	m	k	•	α	15	27	34	34
OBSERVED	EEEE EAND VEL AAVE DOIN	AOU UGAT/L	-21	-17	-20		-11		141	529	984		505	505	507	515	517	520	525	528	529	533	552	574	585	265	598	.283	581	550	485	441	443
910	O & O × ≻⊔	02 UGAT/L							112.79*	127.67*	1.06		0.98		0.17		0.17		C.21		1.02		0.98	0.42	0.85	1.57		12.96	31.19	68.51			
STATION	WEATHER VISIBILITY CLOUD IYPE CLOUD AMT	02 UGAT/L	418	414	418		408	354	288	218	7	Z.	15	16	14	12	01	6	11	11	14	21	13	12	16	16	16	35	25	16	176	228	226
RUISE 026	27.4 20.4 20.40	SIGMAT	21.55	21.59	21.59	21.59	21.60		23.29	24.12	25.87		26.36	26.36	26.42	26.45	26.50	26.52	56.56	26.63	56.69	26.80	26.90	27.08	27.18	27.26	27.31	27.38	27.47	27.57	27.68	27.74	27.74
HOMPSON CR	EMP DRY 2	SAL 0/00	33.895	33.896	33.894	33.892	33.889	33.825	34.083	34.270	34.776	34.827	34.838	34.832	34.816	34.803	34.794	34.176	34.762	34.737	34.712	34.662	34.623	34.567	34.553	34.547	34.545	34.553	34.569	34.591	34.636	34.666	34.665
7 G THO	0 9 Z 3	TEMP DEG.C	28.11	27.98	27.98	27.98	27.95		22.91	20.38	14.74		12.63	12.60	12.23	12.00	11.73	11.53	11.25	10.76	10.35	97.6	8.66	7.16	6.32	5.68	5.21	4.67	3.99	3.17	2.30	1.87	1.85
	22/01/68 13-03-07 102-12-07	ОЕРТН	0	ۍ	10	25	90	99	86	111	151	176	201	902	228	251	274	297	321	345	367	414	461	285	679	171	865	960	1150	1441	1927	2936	3136
	PATE LOATE LOATE	CAST	-	H	-	1	-	-	-			F4	-	7	2	7	۲۵	2	7	7	7	7	7	е	6	e	3	6	٣	m	6,	G)	m

		T G THOMPSON		CRUISE 026	STATION 015	OBSERVED VALUES	VALUES
CAST	DEPTH	NH3 UGAT/L	ALK MEG/L	C02			
-	0	1.24	2.39	2.18			
-	•	0.79					
~	10	0.72					
-	28	99.0	2.38	2.18			
-	8	0.85	2.38	2.18			
-	\$	00.0					
-	2	0.47	2.36	2.35			
-	111	0.38	2.44	2.40			
-	151	0.52	2.44	2.56			
**	176	0.16					
~	201	0.35	2.43	2902			
7	306	0.32					
7	228	0.28					
8	152	0.34					
~	274	96.0	2.43	2.59			
8	297	0.44					
2	321	0000					
7	345	00.00					
7	367	00.00	2.44	2.65			
7	41 4	00.0					
8	194	0.07	2.46	2.10			
E	582	0.43					
6	675	0.39					
•	171	0.63	2.48	2.72			
•	865	99.0					
w	096	0.36	5.49	2.76			
•	1150	06*0					
6	1441	99.0	2.51	2.80		•	
е.	1927	0.81					
8	2936	0.51	2.56	2.73			
ĸ	3136	0.20					

		Ţ	8.33	8.33		8.21			7.80		7.83		7.80					7.72				7.67	
		NO2 UGAT/L	60.0	0.07	0.54	0.39	0.30	0.26	0.14	0.07	0.12	90.0	00.0	0.02	0.08	90.0	40.0	0.17	0.27	00.0	0.03	0.03	0.11
		NO3 UGAT/L	0.28	0.43	5.83	8 • 40	99.6	10.46	30.37	31,53	33.29	33.39	33.41	33.43	33.37	33.22	33.03	32.90	35.74	39.37	45.14	44.68	45.31
ER 100 2	NG 3200	\$104 UGAT/L	4.27	3.89	2.89	3.76	4.27	7.03	23.84	24.72	25.60	27.74	29.74	30.75	34.76	36.65	41.04	56.47	67.27	74.55	86.47	69.46	99.65
WAVE PERIOD	SOUNDS	P04 UGAT/L	0.50	0.45	0.75	0.91	86.0	1.06	2.40	2.31	2.35	2.36	2 • 4 2	2.46	2.61	2.63	2.77	3.03	3.20	3.27	3.39	3.39	3.40
VALUES OC 16 EC 12	GHT 33	0/0 02 SATN	113	114	46	98	73		2	S	•	5	S	11	a n	S	2	m	2	7	m	ις.	9
	WAVE DIREC	AOU UGAT/L	-52	-55	13	59	115		488	486	786	491	200	416	867	516	929	550	570	581	587	588	584
	. - ~	02 UGAT/L									14.79	13.56	14.02	22.52	12.62	11.60	3.95	2.12	0.93	2.29	3.23	10.01	
STATION WEATHER VISTBILITY	CLOUD TYPE	02 UGAT/L	465	468	\$0	368	313	326	10	97	59	28	25	58	41	28	25	19	14	14	20	28	38
UISE 026	6.9	SIGMAT	22.43	22.44	55.99	23.25	23.35		55.96	26.27	26.34	26.41	26.47	56.59	26.65	26.71	26.77	56.94	27.08	27.18	27.26	27.34	27.40
SON CR	TEMP WET 2	SAL 0/00	33.974	33.973	34.115	34.139	34.177	34.202	34.813	34.847	34.853	34.847	34.809	34.766	34.747	34.727	34.696	34.619	34.595	34.578	34.562	34.560	34.578
9 ►		TEMP DEG.C	25.53	25.50	24.01	23.17	25.92		14.46	13.11	12.78	12.42	11.93	11.12	10.72	10.28	9.78	8.37	7.31	64.9	5.71	5.05	64.70
9.4	11-25-0N	DEPTH	ပ	10	20	30	0	50	76	101	126	151	193	240	786	332	379	474	571	199	164	861	686
	LONG 0	CAST		-	-	-	-	-	-	-	-	-	2	7	7	7	7	7	2	2	2	7	2

CAST DEPTH UGAT/L WEG/L MMOL/L L 1		DHF U F	T C THOMPSON CRUISE 026	U1SE 026	STATION 016	ORSERVED
2.15 2.40 1.28 2.37 1.21 2.38 1.55 2.38 1.072 2.42 0.02 2.42 0.70 2.42 0.70 2.42 0.70 2.42 0.70 2.42 0.70 2.42 0.70 2.42 0.81 0.64 0.64 0.65	DEPTH	NH3 UGAT/L	ALK VEG/L	1/ TOMW C05		
1.28 2.37 1.21 1.55 2.38 1.072 2.15 0.02 0.045 0.072 0.081 0.064 0.045 0.045 0.050	6	2.15	2.40	2.10		
1.21 1.55 2.38 1.72 2.15 0.02 2.41 0.45 0.72 2.42 0.82 0.81 0.81 0.64 0.64 0.65	01	1.28	2.37	2.13		
1.55 2.38 1.72 2.15 0.02 2.41 0.45 0.72 2.42 0.82 0.82 0.81 0.64 0.64 0.65 0.65	20	1.21				
1.72 2.15 2.15 0.02 0.45 0.70 0.74 0.72 0.82 0.81 0.67 0.64 0.67 0.45 0.45 0.45	30	1.55	2.38	2.15		
2.15 0.02 0.45 0.70 0.72 0.82 0.82 0.81 0.64 0.64 0.40 0.40 0.40 0.40	0	1.72				
0.02 2.41 0.45 0.70 2.42 0.72 2.42 0.81 0.81 0.64 0.64 0.40 0.45 0.56	20	2.15				
0.45 0.70 0.74 0.72 0.82 0.81 0.64 0.65 0.45 0.45 0.45 0.56	16	0.02	2.41	2.46		
0.70 2.42 0.74 2.42 0.82 2.42 0.81 0.64 2.43 0.45 0.45 0.45	101	0.45				
0.74 0.72 2.42 0.82 0.81 0.64 0.65 0.45 0.45 0.45 0.45	126	0.70	2.42	2047		
0.72 2.42 0.82 0.81 0.27 0.64 0.45 0.45 0.42 0.50	151	0.74				
0.82 0.81 0.27 0.64 0.45 0.40 0.42 0.50	193	0.72	2.42	2.52		
0.27 0.64 0.67 2.43 0.45 0.40 0.42 0.56 2.47	240	0.82				
0.27 0.64 0.67 2.43 0.40 0.42 0.56 2.47	286	0.81				
0.64 0.67 2.43 0.45 0.40 0.62 0.56 2.47	332	0.27				
0.67 2.43 0.45 0.40 0.42 0.56 2.47	379	990				
0.45 0.40 0.42 0.56 2.47 0.50	474	19.0	2.43	2.52		
0.40 0.42 0.56 2.47 0.50	175	0.45				
0.56 2.47 0.50	199	0.40				
0.56 2.47	764	0.42				
	861	95.0	2.47	2.62		
	989	0.50				

VALUES

		ď	8.31	8.31		8.30			8.13		7.85		7.84		7.79	•		7.72				7.79
		NO2 UGAT/L	0.08	0.05	90.0	0.19	0.27	0.41	64.0	0.08	0.02	0.01	0.01	10.0	0.01	0.01	00.0	0.29	0.76	0.02	00•0	00•0
		NO3 UGAT/L	0.39	0.53	0.11	1.11	2.17	2 • 33	12.71	31.10	31.16	31.46	31.51	31.42	32.81	32.89	32.02	32 • 32	34.21	37.00	42.57	45.63
	WAVE PERIOD 2 SECCHI SOUNDING 3054	\$104 UGAT/L	1.13	0.63	0.38	1.63	1.38	1.38	7.40	23.34	23.84	25.60	28.11	30.75	31.98	32.50	39.28	50.45	66.01	73.42	83.71	105.42
	SECCHI	PO4 UGAT/L	0.41	0.62	0.38	0.35	0.43	0.51	1.67	2.40	2.34	2.35	2.39	2.45	2.63	2.83	2.84	3.18	3.40	3.41	3.46	3.51
VALUES	VELOC 09 DIREC 06 DIREC 03 HEIGHT 2	0/0 02 SATN	105	105	105	105	102		7.2	เก	'n	4	m	6 0	2	2	e	e,	7	m	2	8
OBSERVED VALUE	EEEE AAVE DE LE	AOU UGAT/L	-21	-19	-20	-19	œ <u> </u>		119	476	482	767	505	484	505	512	531	552	569	579	290	607
OK 017		02 UGAT/L										13.81	15.77	17.98	14.11	17.98	6.33	1.40	1.53	1.74	1.78	13.64
STATION	WEATHER VISIBILITY CLOUD TYPE CLCUD AMT	92 UGAT/L	423	422	425	425	416	418	309	54	56	20	14	77	28	59	16	15	13	15	13	18
CRUISE 026	2251 2261 3007 4007	SIGWAT	22.11	22.14	22.21	22.29	22.37		23.27	55.99	26.22	26.32	26.39	56.49	26.57	56.66	2647.2	26.92	27.06	27.15	27.23	27.40
THOMPSON C	EMP DRY 201	SAL	34.178	34.167	34.138	34.146	34.127	34.120	34.112	34.802	34.859	34.850	34.829	34.739	34.766	34.731	34.705	34.618	34.589	34.564	34.556	34.558
1 G 7E	ω⊢⊢α:	TEMP DEG.C	27.02	26.92	26.64	26.38	26.09		23.05	14.28	13.40	12.87	12.42	11.81	11.22	10.58	10.10	8.52	7.42	6.60	5.91	4.56
	25/01/68 2-8 12-28-0N 099-17-0W	DEPTH	0	10	53	30	04	20	75	100	125	150	196	542	295	344	393	767	165	169	161	166
	C	CAST	-	-	-	7	-	7	7	~	-	-	2	2	2	2	2	7	7	2	2	7

		Ţ	8.32			8.32			7.82		7.79		1.76		7.70			7.68				7.71
		NO2 UGAT/L	0.03	0.02	0.02	0.02	1.63	0.74	90.0	0.18	0.13	0.07	0.02	0.07	1.32	1.25	0.99	0.97	0.03	0000	10.0	0.01
		NO3 UGAT/L	0.19	0.38	11.1	0.57	3.93	12.97	28.54	29.74	30.34	31.57	32.80	31.11	25.92	25.74	27.22	31.86	37.75	41.22	43.48	44.91
	WAVE PERIOD 29 SECCHI SOUNDING 3292	\$104 UGAT/L	1.88	0.88	1.25	2.01	5.64	7.53	20.08	25.48	26.48	27.11	30.75	33.01	39.16	44.30	51.33	97.59	71.28	80.07	88.23	102.16
	SECOND	P04 UGAT/L	0.49	0.20	0.16	0.33	79.0	1.19	2.37	2.54	2.52	2.42	2.54	2.63	2.80	2.90	3.00	3.24	3.29	3.42	3.44	3.46
VALUES	00 00 00 00 00 00 00 00 00 00 00 00 00	0/0 02 SATN	105	103	105	104	96		6 0	m	7	m	~	4	6	6	М	2	2	6	m	\$
OBSERVED VALUES	WEIND VENTER DIRECTION OF THE DIRECTION	AOU UGAT/L	-18	-12	-20	-14	77		744	491	498	497	515	209	525	534	545	999	581	584	294	593
N 018	,≻m. ≃8.4.0	02 UGAT/L							23.88	1.78	2.00	1.70	3.06#	1.23	1.66	1.87	1.74	1.19	2.59#	1.40	2.51	21.33
STATION	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	412	408	415	412	368	251	36	14	11	14	6	21	14	15	14	14	11	18	17	32
CRU1SE 026		SIGMAT	21.59	21.66	21.68	21.89	22.45		25.38	26.13	26.22	26.28	26.46	56.54	59.92	26.74	26.85	27.02	27.14	27.23	27.29	27.42
THOMPSON CF	BARO 1010 TEMP DRY 20 TEMP WET 20	SAL 0700	34.077	34.076	34.092	34.216	34.046	34.129	34.665	34.840	34.856	34.862	34.800	34.779	34.732	34.688	34.647	34.593	34.570	34.561	34.556	34.567
1 G 1HC		TEMP DEG.C	28.41	28.18	28.16	27.79	25.65		16.55	13.75	13,38	13.14	11.97	11.45	10.65	9.91	9.07	7.68	6.71	00•9	5.43	4.45
	25/01/68 14.4 13-09.0N 098-32.0W	ОЕРТН	ပ	10	50	30	0,	20	75	101	126	151	214	263	312	362	411	510	610	710	810	1011
	HOUR LATE	CAST	-	-	7	~		-		1	-4		2	7	7	2	2	2	7	2	7	2

		T G THO	PSGN CR	T G THOMPSON CRUISE 026	STATION 018	CBSERVED VALUES	LUES
CAST	DEPTH	NH3 UGAT/L	ALK WEG/L	C02			
r4	0	1.62	2.43	2.06			
м	ë	0.77	2.42				
r4	5 0	1.16					
-	33	0.55		2.17			
-4	64	1.58					
-4	50	0.91		2.35			
-	75	2.09	2.28	2.55			
4	101	0.74					
~ 4	126	0.75	2.39	2.54			
~	151	0.39					
7	214	0.31	2.38	2.47			
7	263	0.24					
7	312	00.00	2.38	2.54			
7	362	9**0					
7	411	0.32					
~	510	0.28	2.39	2.59			
~	610	0.14					
~	713	0.45					
7	910	0.14					
~	1011	0.01	2.43	2.50			

		£	1.23	8.41		8.20			40.0		7.89		7.76		7.70			7.67				7.60
		M02 UGAT/L	0.42	0.41	040	0.37	0.38	1.61	0.71	0.23	0.26	0.0	0.02	0.01	0.02	0.98	0.11	1.07	0.41	0.18	00.0	00.0
		*03 UGAT/L	1.52	2.68	2.63	3.86	4.67	10.75	15.05	20.32	25.96	32.23	33.13	33.44	32.34	28.15	30.65	29.11	34.13	38.35	41.68	44.63
	MAVE PERIOD 3 SECCHI SOUNDING 3345	\$104 UGAT/L	2.64	2.51	3.39	4.14	4.27	6.15	10.29	14.06	20.08	24.85	27.48	29.74	33.63	37.78	40.16	54.84	64.16	73.29	79.57	93.25
	SECCH	PO4 USAT/L	0.00	0.48	0.64	0.63	19.0	1.10	1.42	1.74	2.06	2.39	2 - 4 5	2.55	2.62	2.79	2.88	3.21	3.28	3.39	3.43	3.53
VALUES	2000 th	0/0 02 SATN	101	102	101	100	86		7.1	25	64	7	9	9	~	m	2	2	~		m	m
OBSERVED VALUE	KEEK KAND AVED TO DIE	AOU UGAT/L	7	s,	~	~*	•		129	217	546	501	501	809	518	524	532	553	572	5.84	587	909
610 W	Xexe Venxe	02 UGAT/L										8.71	4.84	4.93	3.82	2.12	1.91	1.23	1.74	1.36	2.59	7.35
STATION	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	32 UGAT/L	412	415	415	414	412	356	310	237	535		15	1.4	13	1.	13	12	σ.	c co	15	1.8
CRU1SE 026	10 • 2 26 • 2 24 • 4 86	SIGMAT	22.35	22.44	22.61	22.73	22.89		23.87	24.46	25.45	26.25	26.35	26.45	26.54	26.63	26.71	26.91	27.04	27.14	27.22	27.35
THOMPSON CA	BARO 101 TEMP DRY TEMP WET	SAL 07:00	34,131	34,131	34.138	34.141	34.161	34.180	34.282	34.429	34.665	34.869	34.844	34.808	34.768	34.739	34.714	34.628	34.578	34.566	34.554	34.557
¥ U		TEWP DEG.C	26.17	25.86	25.35	24.96	24.47		21.37	19.56	16.28	13,30	12.70	12.07	11.39	10.78	16,23	8.63	7.48	6.72	6.01	86.4
	26/01/69 3°2 13-52.0N 97-65.0W	0EP TH	0	10	19	53	39	8	72	96	120	144	191	236	279	322	368	459	552	979	744	866
	100 T	CAST	-		-	- 4	-	-	-	-	-	-	7	7	7	~	7	7	2	7	7	7

		ď.	8.23	8.25		8.14			80.8		7.97		7.73		7.70			7.63				7.60
		NO2 UGAT/L	90.0	90.0	0.14	0.83	1.09	1.13	1.40	0.41	0.92	0.68	1.30	0.55	0.11	76.0	1.34	0.92	0.83	69•0	0.02	00.0
		NO3 UGAT/L	2.13	1.29	74.4	7.29	6.82	7.33	10.46	16.32	19.09	22.52	27.92	29.79	30.57	32.14	26.07	26.61	31.62	35.24	35.57	44.33
	MAVE PERIOD 21 SECCHI 21 SOUNDING 3567	S104 UGAT/L	2.38	2.64	3.26	5.15	5.27	6.15	7.40	11.55	13.93	17.32	25.48	29.12	31.50	35.27	39.91	50.70	63.50	71.28	78.44	93.37
	SECOND SOUND!	PO4 UGAT/L	97.0	0.43	0.56	96•0	1.08	0.97	1.14	1.47	1.73	1.97	2.58	7.64	2.67	2.74	2.87	3.22	3.41	3.48	3.48	3.63
VALUES	VELOC 02 DIREC 11 DIREC 13 HEIGHT 2	0/0 02 SATN	108	108	106	16	88		79	65	79	58	7	-	~	-	-	-	-	-		~
OBSERVED VALUE	EEEE AVED VEINE HEIST	AOU UGAT/L	-30	-32	-23	39	52		06	155	165	197	667	515	520	527	533	554	571	581	290	609
070 NG	.≻.ल. 	02 UGAT/L											1.32	1.02	1.61	1.44	1.19	1.23	1.32	1.49	1.32	6.16
STATION	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	438	077	436	382	375	363	344	287	262	270	7	æ	4	'n	S	3	ď	•	7	12
CRU1SE 026	23.0 3.0 3.0 8.9 8.7	SIGMAT	22.35	22.35	22.53	22.96	23.25		23.59	23.92	24.61	24.97	26.16	26.37	56.46	26.51*	26.63	26.81	56.99	27.10	27.18	27.34
THOMPSON CF	BARO 131 TEMP DRY TEMP WET REL HUMID	SAL 0700	34.131	34.126	34.066	34.107	34.131	34.165	34.210	34.231	34.484	34.554	34.827	34.829	34.305	34.708*	34.734	34.646	34.590	34.581	34.563	34.560
1 G 1H	80 Z 3	TEMP DEG.C	26.18	26.15	25.42	54.09	23.16		22.19	21.03	19.15	17.90	13.59	12,53	11.98	11.34	10.76	9•31	7.87	7.08	6.36	5.05
	26/01/6/ 130/ 14-41-07 096-51-01	DEPTH	0	10	50	53	39	67	74	Éć	123	147	180	222	292	306	351	437	529	623	720	921
	LOATE LOATE	CAST	н	-	-	-	7	-	7	-	-	-	7	7	7	2	7	7	7	7	~	~

		7 G THO	T G THOMPSON CRUISE 026	UISE 026	STATION 020	020	OBSERVED VALUES	VALUES
CAST	ОЕРТН	NH3 UGAT/L	ALK MEG/L	C02				
-	0	3.07	2.44	2.12				
-	2	1.10						
-	20	1601						
-	53	1.46	2.38	2.19				
-	39	0.97						
-	64	1.97	2.41	2.21				
-	74	0.87	2.38	2.24				
-	98	0.57						
-	123	1.26	2.40	2.34				
~	147	0.37						
~	180	0.13	2.41	2.46				
7	222	90.0						
7	292	0.13	2.41	2.51				
8	306	0.08						
7	351	0.20						
~	437	0.55	2.43	2.57				
7	626	00.0						
~	623	00.00						
7	720	00.0						
7	921	0.27	2.46	2.64				

		Ŧ	8.07	8.06		8.03			7.93		7.66		7.63		7.60			7.54				7.51
		NO2 UGAT/L	0.36	0.38	0.41	0.41	0**0	0.37	0.16	67.0	0.10	0.02	0.04	0.01	0.03	0.72	1.14	1.00	0.52	00.0	00.0	00•0
		NO3 UGAT/L	5.15	6.37	7.28	8 • 82	06.6	10.56	16.99	24.35	32.59	32.71	32.65	32.18	30.60	28.24	27.74	29.56	35.50	39.88	44.21	43.99
	ER IOD 3	\$104 UGAT/L	5.27	5.27	6.15	7.15	7.66	8.16	15,31	16.94	23.97	25.73	29.24	31.25	34.64	40.03	48.44	59.36	72.79	79.19	87.60	102.16
	WAVE PERIOD SECCHI SOUNDING 4	PO4 UGAT/L	0.65	0.86	0.88	0.97	0.98	66.0	1.45	2.05	2.40	2 • 39	2.51	2.61	2.72	2 • 82	3.00	3.24	3+45	3.43	3.46	3.48
VALUES	00 100 100 100 100 100 100 100 100 100	0/0 02 SATN	100	46	63	06	88		70	28	3	z,	2	~	-	-	-	0	7	-	-	4
OBSERVED VALUES	WIND VELOWAND DIRECTOR WAVE DIRECTOR HEIGH	AOU UGAT/L	0	14	. 31	45	20		134	336	487	488	525	521	529	539	926	895	586	565	409	603
N 021	~100 00 −1 ×	02 UGAT/L										12.49	4.63	2.89	2.29	0.98	1.36	1.19	1.36	1.70	2.46	15.38
STATION	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	419	408	368	386	380	373	319	128	18	25	œ	9	4	4	4	7	4	9	•	22
CRUISE 026	8 →80	SIGMAT	22.97	23.13	23.23	23.37	23.47		24.46	24.90	26.15	26.30	26.57	26.45*	26.57	26.68	26.88	26.95	27.12	27.16*	27.29	27.41
THOMPSON CR	BARO 1008 TEMP DRY 26 TEMP WET 23 REL HUMID	SAL 0/00	34.224	34.228	34.174	34.233	34.243	34.247	34.431	34.538	34.366	34.850	34.823	34.737#	34.762	34.723	34.670	34.612	34.573	34.499#	34.562	34.568
T G THO		TEMP DEG.C	24.36	23.84	23.33	23.01	55.69		19.56	19.15	13.79	12.97	11.46	11.76	11.23	10.45	8.99	9.25	68.9	5.12	5.47	4.50
	26/01/68 23.5 15-16.0N 095-55.0W	ОЕРТН	6	10	19	62	39	64	73	76	122	146	201	252	298	346	397	964	969	969	796	966
	LAN LANGUAE ON SOUTE	CAST	-	7	-	-	-	-	7	-	-	7	7	7	7	7	7	7	~	~	7	7

		Ŧ	8.18	8.18		8.10			7.86		1.71		7.70		7.67			7.58				7.60
		NO2 UGAT/L	0.26	0.24	0.58	0.63	0.59	0.48	44.0	0.20	0.10	0.02	0.02	0.02	0.38	1.09	0.97	0.71	69.0	0.02	00.0	0.01
		NO3 UGAT/L	26.2	2.75	7.22	8.33	11.37	13.90	24.73	30.56	31.33	28.30	32.71	32.29	31.94	28.08	27.78	31.40	31.34	37.13	40.84	44.20
	ER 10D X NG 1188	\$104 UGAT/L	2.13	1.25	4.02	6.27	8.28	10.79	18.20	23.59	25.85	28.24	27.86	32.13	33.76	37.65	44.80	61.87	06.69	78.81	88.60	19.06
	MAVE PERIOD SECCHI SOUNDING 1	P04 U6AT/L	0.55	0.59	0.92	96.0	1.20	1.31	70.2	29.5	2.62	2.47	2.55	2.59	2.71	2.93	3.06	3.29	3.40	3.55	3.50	3.50
VALUES	00 E C C C C C C C C C C C C C C C C C C	0/0 02 SATN	104	104	91	89	79		54	4	60	7	m	6	8	7	-1	-	-	-	-	-
OBSERVED VALUE	EEEE EEEE EEEE EEEE	AOU UGAT/L	-17	-14	37	4	06		357	482	767	204	207	510	523	527	245	695	584	597	609	607
N 022	≽m. ø×0	02 UGAT/L									12.37	6.54	6.25	7.01	5.69	1.36	1.23	1.44	1.44	2.38	3.61	5.78
STATION	WEATHER VISIBILIT CLOUD TYP	02 UGAT/L	459	427	385	376	344	324	112	21	11	12	15	16	o	12	60	9	4	4	7	6
CRUISE 026	1012-7 255-0 24-99	SIGMAT	22.54	22.57	23.07	23.22	23.65		25.13	26.09	26.21*	26.35	26.43	56.49	26.53	26.60*	26.77	26.99	27.11	27.23	27.30	27.33
THOMPSON CR	BARO 101 TEMP DRY TEMP WET	SAL 0/00	34.124	34.125	34.141	34.230	34.291	34,331	34.650	34.842	34.790*	34.838	34.814	34.805	34.741	34.690	34.704	34.598	34.571	34.569	34.561	34.559
7 G THC		TEMP DEG.C	25.53	25.43	23.81	23.52	22.17		17.58	13.98	13.21	12.70	12.19	11.64	11.34	10.73	9.85	7.95	86.9	40.9	5.39	5.14
	24/01/68 15-36-57 94-40-48	БЕРТН	0	10	19	53	39	48	72	96	120	144	201	35 2	302	350	401	664	009	700	800	897
	01 10 100 10 100 100 100 100 100 100 100	CAST	-	~	~	-	-	-	-	-	-	-	7	7	7	2	7	2	7	7	2	~

		7 6 740	T G THOMPSON CRUISE 326	101SE 026	STATION 022	22	OBSERVED VALUES	VALUES
CAST	DEPTH	SH3 UGAT/L	ALK MEG/L	C02				
-4	c		2.34	2.16				
-	10		2.81	2.19				
~	19							
	53		2.31	2.20				
-	39							
4	67		2.33	2.28				
-1	27		2.34	2.37				
-	96							
~	120		2.36	2.43				
~ 4	144							
7	201		2.37	7.46				
7	252							
7	302		2.36	2.48				
~	350							
~	401							
7	664		2.39	2.55				
7	909							
7	700							
2	400							
~	168							

		£	8.29			60.0			7.77		7.86		7.82
		NO2 UGAT/L	0.31	0.52	0.78	0.68	0.10	0.65	0.12	0.01	0.05	90.0	00.0
		NO3 UGAT/L	3.52	66.4	10.20	11.09	14.94	19.32	28.54	29.57	30.71	30.83	30.42
	WAVE PERIOD 2 SECCHI SOUNDING 302	\$104 UGAT/L	2.38	2.38	5.65	7.40	9.19	12.05	21.33	22.59	24.35	25.60	32.25
	SECONDI SOUNDI	PO4 UGAT/L	0.57	0.75	1.24	1.19	1.44	1.70	2.10	2.15	2.17	2.77	2.55
VALUES	2000 F	0/0 02 SATN	86	93	10	90	62	43	\$	•	6	7	•
OBSERVED VALUES	EEEE EEEE EEEE EEEE EEEE	AOU UGAT/L	_	59	81	85	168	255	494	487	491	465	505
1 023	~800r	02 UGAT/L							13.30	4.89	3.61	2.76	4.25
STATION	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	407	390	348	347	272	194	23	13	15	12	22
RU1SE 026	1012.5 24.4 23.3 91	SIGMAT			23.43	23.53	23.95	24.55				26.18	26.49
T G THOMPSON CRU	BARO 10 TEMP DRY TEMP WET	SAL 0/00	34.122	34.130	34.255	34.262	34.367	34.694	34.871	34.874	34.881	34.866	34.794
1 G 1H		TEMP DEG.C	25.05	26.32	22.87	22.52	21.29	20.00	15.55	14.20	13.66	13,63	11.77
	27/01/68 12.5 15-47.0N	ОЕРТН	0	10	19	62	38	47	20	93	115	136	569
	CAOAO NACACA	CAST	-	~	-	-	-	-	-	-	~	-	-

		T G TH0	MPSON CF	T G THOMPSON CRUISE 026	STATION 023	023	OBSERVED VALUES	VALUES
CAST	CEPTH	NH3 UGAT7L	ALK MEG/L	C02 MMOL/L				
-4	6		2.32	2.14				
-	10		2.29	2.21				
	13							
	53		2.30	2.26				
	38							
~	47		2.31	2.33				
-	70		2.32	2.46				
-	93							
-	115		2.32	2.47				
-	136							
~	569		2.34	2.48				

	Ĩ		66.93	9.30	97.0	97.0
	40 2	3/18	n 4			0.62
	NO3	7 7 7			07.6	7.79
ER10D 2	\$104	27.76	41.6	4.27	06.4	5.90
WAVE PERIOD SECCHI SOUNDING	P04 UGAT/L	09.0	85.40	10.0	0.91	1.03
VALUE SECTION OF SECTI	0/0 02 SATN	100	80	68	60	61
OBSERVED VALUES WIND VELOC 16 WIND DIREC 055 WAVE DIREC 055 WAVE HEIGHT 2	AOU UGAT/L	7	• •	89	70	80
й പ аии 4	02 UGAT/L					
STATION 024 WEATHER XI VISIBILITY B CLOUD TYPE 2 CLOUD AMT 2	02 UGAT/L	417	407	371	351	345
7U.SE 026 33.2 28.8 28.8	SIGMAT	22.68	22.73	22.84	22.97	23.20
T G THOMPSON CRUISE BARO 1013-2 TEMP DRY 28-8 TEMP WET 28-6 REL HUMID 96	SAL 0/00	34.056	34.057	34.076	34.110	34.157
မ	TEMP DEG.C	24.89	24.75	24.42	24.07	23.42
27/01/68 10-01/68 16-00-0M 99-12-00M	DEPTH	0	10	20	30	36
25.25 25.25 36.25	CAST	-	-	-	~	-

		Ţ.	8.38	8.37		7.89		7.87	7.84		7.88		7.83		7.80			7.74				7.70	7.82	7.92		7.89			7.87			7.87
		NO2 UGAT/L	0.17	0.16	66.0	90.0	90.0	0.03	0.03	0.03	0.03	0.02	0.01	0.01	00.0	0000	0.32	0.32	0.33	0.02	00.00	0.02	2.07	0.03	60.0	*0*0	50.0	0.03	90.0	0.03	0.07	60.0
		NO3 UGAT/L	0.55	0.77	26.08	30.36	30.75	31.11	31.44	31.74	31.78	32.29	32.98	32.93	31.05	31.77	76.62	32.75	34.63	40.07	41.56	69.44	41.15	36.86	37.56	37.06	36.55	37.16	37.17	36 • 78	36.74	36.97
	EP 10D 05	S104 UGAT/L	3.26	3.76	20.33	22.97	23.84	23.59	24.72	26.35	25.60	27.11	29.74	31.88	36.02	39.28	44.68	55.60	67.02	74.30	82.83	98.27	134.41	149.22	149.22	150.98	151.23	151.23	150.22	150-10	150.10	148.72
	MAVE PERIOD SECCHI SOUNDING 6	P04 UGAT/L	9.36	0.41	2.13	2.29	2.25	2.35	2.31	2.39	2.36	2.32	2.45	2.52	2.68	2.74	2.90	3.10	3.22	3.26	3.37	3.44	3.00	2.76	2.72	2.75	2 • 12	2.80	2.14	2.75	2.73	2.80
VALUES	00 00 00 00 00 00 00 00 00 00 00 00 00	0/0 02 SAT!	118	117	13	\$	m	7	m	4	•	•	9	2	-	-	ပ	-	3	1	-	2	19	32	3,4	35	35		35	35	35	35
OBSERVED	2222 2222 2222 2002 1000 1000 1000 1000	ACU UGAT/L	-71	-69	423	478	491	567	967	493	184	483	512	525	535	240	255	695	581	265	691	607	528	757	439	436	787		432	432	431	067
N 025		02 UGAT/L						11.81		12.92	19.63	19.29	7.78		1.78	1.66	0.59	0.08	6.83	0.81	1.15	9.39										
STATION	VERATHER CLOUD TYPT	02 UGAT/L	478	419	61	23	13	1.1	16	22	33	31	14	10	4	'n	2	4	9	\$	•	14	125	215	228	231	232	234	534	233	233	232
CRUISE 026	₩₩₩₩ ••• ••• •••	SIGMAT	22.22	22.35	25.55	26.05	26.11	26.16	26.29	26.33	26.33	26.42	56.49	26.57	56.65	26.71	26.80	26.97	27.07	27.19	27.25	27.39	27.63	27.74	27.73	27.74	27.73		27.73	27.72	27.72	27.72
HOMPSON CR	MAD DRY 2	SAL 9700	34.047	34.048	34.691	34.840	34.842	34.840	34.879	34.853	34.853	34.843	34.803	34.177	34.750	34.719	34.682	34.605	34.579	34.576	34.554	34.556	34.627	34.568	34.671	34.673	34.675	34.616	34.586	34.672	34.671	34.591
1 G THC	& 2 2 4 4 4 4 9 4 4 4 9 4 4 4 9 4 4 4 4 9 4 4 4 4	TEMP DEG.C	26.37	25.97	15.93	14.15	13.87	13.64	13.12	12.82	12.54	12.32	11.80	11.29	19.72	10.25	9.53	9.10	7.26	6.37	5.76	4.72	2.19	1.89	1.98	1.91	5.04		2.03	2.11	2.16	2.23
	28/01/68 22-0 13-59- 93-30-	DEPTH	c	10	20	30	39	67	7.4	98	123	149	102	152	305	352	452	503	603	704	400	1512	1592	5490	3190	3683	4090	6877	6830	5274	56.97	6100
	04101 0401 0401 0401	CAST	-4	-	~		-4	4	~ 4	-	-		~	2	7	2	7	7	2	8	7	7	e	e.	٣	6	ĸ	e	m	m	e,	κ,

		T G THOMPSON CRUISE 026	MPSON CF	101SE 026	STATION 025	OBSERVED VALUES	VALUE
CAST	DEP TH	NH3 UGAT/L	ALK MEG/L	C02 MMOL/L			
~	0	00**	2.29	2.03			
~	01	96*0	2.29	2.07			
-	20	60°C					
~	30	0.82	2.33	2.33			
~	39	0.32					
-	64	60.0	2.32	2.48			
-	74	0.76	2.34	2.54			
-	86	0.15					
-	123	0.24	2.33	2.53			
-	148	0.51					
7	201	0.19	2.32	2.54			
7	162	0.48					
7	302	0.25	2.34	2.59			
~	352	0.22					
. 2	705	00.00					
7	503	0.10	2.41	2.61			
~	603	0.05					
7	104	0.38					
2	804	0.10					
~	1012	0.28	2.40	7907			
6	1692		2.44	2.70			
6	2490		2.47	2.68			
60	3190						
3	3689		2.48	2.68			
6	0607						
6	4489						
6	0687		2.47	2.66			
E	\$534					•	
6	5697						
6	6100		2.47	2.60			

		g I		8.41		æ • •
						0.14
•		NOB	7/1400	1.93	1.26	7. 26
ER10D	SOUNDING 38	4010	17.000	30 0 10 0	9 60	0.25
A P	SOUTE					99.0
VALUES	288 241 28	076 02 SAT:		K 0 6	2	9. 6
OBSERVED VALUES	WAVE DIREC 28	US A CU	136	-37	1 4	2.3
ON 026	:₩ :0.b	CO UGAT/L	i			
STATION STATION STATION STATES	CLOUP TYPE O	72 UGAT/L	439	643	459	392
926		SIGMAT	21.65	21.76	22.01	22.45
THOWPSON CRUISE BARD 1009.0	EMP KET	SAL	33.567	33.557	33.597	33,919
± ω⊢ υ ⊢		TEMP DEG.C	27.05	26.65	25.95	25.33
DATE 29/01/69 HOUR 23.2	13-43-0N 391-08-02	ОЕРТН	Ç	01	20	30
SATE POUTE	LONG	CAST	~	-1	-	-

		£	8.44	8.27	8.35			7.98	7.85		7.93		7.88		7.87			7.79				7.77
		NO2 UGAT/L	0.03	0.02	0.01	0.41	0.70	1.59	0-11	0.03	0.02	0.01	0.03	0.01	00.00	90.0	1.11	1.15	0.08	0.16	0.02	00.0
		NO3 UGAT/L	0.10	0.14	60.0	3.33	10.61	19.86	30.36	30.94	30.95	31.84	32.03	32.60	31.43	29.82	27.35	31.01	36.10	38.96	41.29	44.16
	ER 100 2	S104 UGAT/L	0.88	0.75	0.63	1.13	5.27	11.80	21.84	22.84	24.10	24.97	28.24	30.62	33.63	38.53	45.18	61.62	04.69	75.93	83.33	101.78
	WAVE PERIOD SECCHI SOUNDING 1	P04 UGAT/L	0.23	0.21	0.18	94.0	1.00	1.65	2.38	2.39	2.38	2.38	2.42	2.48	2.62	5.69	2.90	3.24	3.28	3.34	3.36	3.47
VALUES	0000 11 0000 11 0000 11	0/0 02 SATN	111	111	112	101	81	45	~	7	~	w	2	-	~		~	~		~	-	4
OBSERVED VALUES	EEEE HOUSE	AOU UGAT/L	-42	-43	84-	\$	80	243	486	967	767	664	509	519	527	536	246	572	584	593	665	909
	∞ ×0∙ ≻ພ	02 UGAT/L								3.87	6.59	5.91	3.61	3.70	1.87	1.32	0.38	0.21	0.51	0.42	2.00	16.19
STATION 027	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	448	450	456	420	347	202	6	6	15	13	σ	7	,	•	7	ŝ	4	4	7	54
CRU1SE 026	228 788 788 90 90 90 90	SIGMAT	21.73	21.77	21.84	22.29	23.17	24.19	26.62	26.15	26.23	26.28	26.38	26.50	26.58	26.68	26.78	56.99	27.26*	27.19	27.26	27.40
THOMPSON CR	BARO 101 TEMP DRY 2 TEMP WET 2 REL HUMID	SAL 0700	33.556	33.555	33.555	33.669	340048	34.436	34.837	34.866	34.874	34.863	34.850	34.813	34.758	34.733	34.677	34.567	34.757*	34.573	34.559	34.567
1 G THO		TEMP DEG.C	26.76	26.63	26.40	25.22	23.22	20.62	14.75	13.76	13.41	13.11	12.59	11.81	11.12	10.50	9.62	7.76	96.9	6.35	5.71	4.57
	30/01/68 3-1 13-22-0N 91-24-0W	ОЕРТН	0	10	50	30	04	20	76	101	126	151	201	252	302	352	403	503	909	705	811	1012
	LATE LATE LONG	CAST	-	-	~	~	~	-4	~	-	-		7	8	~	7	~	7	~	7	~	7

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		ğ	8.36	•		8.32		7.89	7.88		7.67		7.84		7.78			7.75				7.76	7.94	7.94			7.93	
		NO2 UGAT/L	0.23	0.15	0.14	0.11	0.29	0.14	79.0	29.0	90.0	0.08	0.00	0.03	1.24	1.60	1.34	0.83	0.24	0.01	00.0	0.01	0.02	0.02	0.03	0.03	0.02	,
		N03 UGAT/L	0.95	06.0	1.75	2.83	13.75	28.39	27.90	28.88	30.07	31.81	32.62	30.52	27.22	26.53	27.46	32.63	36.57	41.09	43.41	43.99	37.34	37.46	37.16	37.16	37.17	1
	MAVE PERIOD 2 SECCHI SOUNDING 5495	SIO4 UGAT/L	1.88	2.01	1.83	2.13	8.66	19,58	22.46	24.10	24.72	26.61	28.49	35.77	42.17	47.69	54.22	63.88	72.92	78.56	99.02	99.02	149.50	147.84	147,59	147.84	147.84	
	SECCHI SOUNDI	P04 UGAT/L	0.43	3.43	64.0	0.57	1.91	2.35	2.38	2.41	2.40	2.40	2.45	2 • 70	2.85	2.95	3.11	3.77	3.88	3.42	3.43	3.51	2.80	2.79	2.83	2.76	2.80	
VALUES	00 667 32 647	0/0 02 SATN	108	101	106	102	63	2	m	e,	m	4	2	2	2	-	2	2	-	2	2	4	35	36	35	36	36	
OBSERVED	WIND VEL	ACU UGAT/L	-31	-29	-22	80	157	473	486	649	764	493	509	526	537	548	552	569	583	589	262	599	434	429	430	428	428	•
N 028	>₩ Q ® Q	02 UGAT/L								0.58	1.66	3.82*	2.55	0.64	0.51	0.42	1.74*	0.21	0.77	2.63	4.08	13.47						
STATION	WEATHER VISIBILIT CLOUD TYP	32 36AT/L	430	433	428	416	272	12	12	15	15	2.1	12	10	10	œ	13	11	6	14	15	54	233	240	236	237	236	
RU1SE 026	6.000 0.000 0.000 0.000	SIGWAT	21.87	22.12	22.19	22.28	23.47	25.67	26.02	26.16	26.23	26.32	56.44	26.61	26.74	56.84	26.90	27.04	27.15	27.24	27.29	27.49*	27.73	27.75	27.74	27.75	27.64	
HOMPSON CE	EMP DRY 2 EMP WET 2 EL HUWID 2	5AL 3763	34.131	34.107	34.053	34.063	34.275	34.814	34.878	34.886	34.870	34.871	34.856	34.758	34.710	34.685	34.624	34.608	34.584	34.575	34.564	34.688#	34.664	34.683	34.679	34.700	34.571	34.677
T G THO	∞⊢⊢ α	TEMP DEG.C	27.61	26.83	56.49	26.22	22.17	15.81	14.41	13.81	13.37	12.94	12.31	10.95	10.01	9.31	8.67		6.70	66.5	5.52	4.61	1.93	1.86	1.98	2.08	2.12	
	30/01/68 13-0 13-0 091-49-0W	DEPTH	c	10	50	30	0.4	20	76	101	126	151	199	549	568	349	399	Ŏ.		9	0	766	3010	3514	4422	5127	5534	9755
	108 108 108 108 108 108 108 108 108 108	CAST	2	~	7	~	~	7	7	2	~	7	€	6	9	6	e	e	m	m	m	€	-	-	-	-	-	-

,

		1 0 10	ID NOS du	T G THOMPSON CRUISE 326	STATION 028	OBSERVED VALUES
CAST	DEPTH	USATAL	ALK MEG/L	C02		
~	0	1.08	2.38	2.23		
7	01	1.27	2.38	2.17		
~	5 0	1.67				
~	8	1.57	2.40	2.17		
~	9	2.14				
~	8	1.20	2.42	2.48		
~	76	1.42	2.41	2.52		
~	101	1.24				
~	126	0.91	2.43	2.54		
~	151	990				
•	138	0.48	2.42	2.55		
•	546	0.39				
•	53	0.13	2.43	2.59		
•	349	00.00				
~	399	0.27				
•	664	0.16	2.46	2.62		
~	865	0.14) 		
•	869	0.31				
~	198	0.34				
	464	6.00	2.47	2.65		
-	3010		2.53	2.65		
-	3514		2.54	2.73		
-	44.22					
~4	5127					
-	9534		2.54	2.68		
-	5546					

		£	8.36	8.38		8.29			8.00		7.93		7.87		7.88			7.79				7.73
		N02 UGAT/L	0.27	0.23	9.26	0.50	0.23	77.0	0.52	0.08	0.03	0.02	0.02	0.02	0.01	0.01	0.02	1.84	1.21	0.34	00.0	0.01
		NO3 UGAT/L	00.0	0.11	1.09	00.0	8.02	11.04	54.66	30.51	31.23	32.08	32.88	32.88	31.34	32.51	31.75	25.87	29.31	36,35	41.56	43.86
	ER100 X NG 3176	SIO4 UGAT/L	1.63	1.25	1.13	1.13	1.13	2.13	19.08	24.22	24.60	25.48	27.74	28.49	31.00	33.63	36.14	49.07	50.37	70.15	75.43	91.14
	AAVE PERIOD SECCHI SOUNDING 3	P04 UGAT/L	92.0	0.18	0.30	99•0	0.92	1.12	2.03	2.39	2.31	2.29	2 • 4 2	2.48	2.48	2.56	2.64	2.95	3.12	3.22	3.25	3.39
VALUES	200 200 200 200 200 200 200 200 200 200	5/0 02 SATN	114	114	124	108	101		15	2	7	æ	-	7	~		-	-	-	-	⊶	~
OBSERVED VALUES	EEEE EEEE EAND MMD VM TOUM TOUM	AOU UGAT/L	-57	-56	96-	-30	7		707	767	\$67	169	808	514	517	\$2B	533	188	573	583	165	608
P 029	eo × o^ ≻ <u>w</u> i	32 UGAT/L								3.40	5.35	91.6	3.06	6.03	96.9	1.23	2.51.	0.25	6.647	Ce-30	1.97	4.67
STATION 029	WEATHER VISIBILIT CLOUD TYPI	92 UGAT/L	458	453	201	044	417	363	73	œ	12	15	7	13	11	1	1	ď	1	4	1	10
CRUISE 026	1111 200 200 200 200 200 200 200 200 200	SIGWAT	21.92	21.93	22.30	55.69	22.97		25.35	26.12	26.19	26.28	26.37	25.45	26.50	26.56	26.66	26.84	27.36	27.12	27.19	27.33
G THOMPSON CR	TEMP DRY TEMP WET	SAL	34.069	34.006	34.232	340412	34.418	34.450	34.684	34.885	34.865	34.870	34.860	34.951	34.777	34.766	34.741	34.667	34.610	34.598	34.559	34.561
1 G 1H		TEMP DEG.C	27.22	27.18	26.55	25.74	24.85		16.74	13.99	13.58	13.15	12.68	12.24	11.63	11.09	10.64	9.25	7.94	7.00	6.33	5.14
	31/01/69 2°4 12-49-04 092-35-04	DEPTH	0	٥	19	28	37	94	1,	96	120	3	186	231	275	319	364	452	245	631	722	915
	TACT FON SATE	CAST	-	7	-	~	~	-		-4		~	2	~	~	~	7	~	~	7	~	2

		7 G 7HQ	NOS dw	T G THOMPSON CRUISE 026	STATION 029	OBSERVED VALUES	VALUES
CAST	0EP TH	NH3 UGAT/L	ALK MEG/L	CO2 MMOL/L			
-	0		2.35	2.12			
-	Φ.						
-	19						
-	28		2.37	2.19			
~	37						
-	9		2.37	2.24			
-	11						
-	96						
	120						
~	:						
7	186		2002	2044			
~	231						
~	275						
7	318						
~	364						
~	452		2.43	2.54			
~	245						
~	631						
7	722						
7	915		2.45	2.59			

		t sa	8.67	3.68		8.68			8.17		7.87		7.87		7.81			7.68				7.59
		N32 UGAT/L	0.05	C.02	0.03	0.02	0.05	0.72	90.0	0.35	0.05	C.03	90.0	0.01	0.02	0000	00.0	0.01	0.52	00.0	0.0	00.0
		NO3 UGAT/L	0.33	0.13	0.10	0.14		98.0	21.94	28.14	29.28	27.49	31.75	31,38	32.71	32.73	32.19	30.58	33.65	34.16	36.30	43.74
	MAVE PERIOD 15 SECCHI SOUNDING 3658	SI04 UGAT/L	C•63	0.50	0.88	0.25		1.38	12.42	22.84	24.35	24.97	26.98	27.99	31.25	32.50	38.03	48.82	60.62	70.91	77.94	92.37
	SSE SOCIE	P04 UGAT/L	0.22	0.16	61.0	0.17	5.22	0.35	1.74	2.27	2.24	2.34	2.37	2.41	5.49	2.71	3.01	3.26	3.88	3.69	3.45	3.40
VALUES	24 60 64 70 64 70 64 70 70 70 70 70 70 70 70 70 70 70 70 70	070 02 SATN	105	105	106	105	105		22	0	o	4	5 0	6	6	w	-	-	7	-	-	4
OBSERVED VALUE	EEEE	AOU USAT/L	61-	-18	-22	-18	-18		350	453	465	492	663	617	517	506	535	554	575	588	593	265
OE0 NO		02 UGAT/L								30.13	28.98	8.92	15.47	32.26	8.20	14.83	3.57	0.85	0.38	1.06	3.14	19.08
STATION	VERALLICATION OF THE PER AMPRICAL PROPERTY OF THE PER AMPRICAL PER AMP	02 JGAT/L	419	418	423	419	418	375	76	4 8	4.5	21	23	4.5	14	29	0 0	4	m	4	6	27
CRUISE 026	125 200 30 0 0 40 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SISMAT	21.43	21.45	21.45	21.46	21.46		54.34	26.00	26.20	26.28	26.39	26.51	26.55	26.61	26.71	26.95	27.04	27.15	27.24	27.37
THOMPSON C	RHEED CRY 10 CEET	SAL 0700	33.522	33.529	33.518	33.543	33.523	33.511	34.507	34.780	34.785	34.938	34.879	34.863	34.792	34.758	34.738	34.666	34.618	34.585	34.580	34.569
THE OF	ar 23	TEMP DEG.C	27.62	27.56	27.55	27.56	27.54		20.25	14.17	13.23	13.02	12.66	11.98	11.44	10.99	10.34	9.16	7.70	6.71	00•9	4.91
	31/01/6	ЭЕРТН	c	10	50	30	39	64	27	66	124	149	196	546	293	340	387	483	581	678	776	972
	LADE LATE CONO	CAST	-4	-	~	-	1	-	-	-		-	8	~	7	~	7	7	7	~	7	7

		T G TH0	MPSON CF	T G THOMPSON CRUISE 026	STATION 030	OBSERVED VALUES
CAST	ОЕРТН	NH3 UGAT/L	ALK MEG/L	C02		
-	0		2.38	2.10		
-	9		2.37	2.13		
-	50					
-	30		2.40	2.10		
-	39					
**	\$		2.37	2.16		
~	75		2.41	2.43		
~	\$					
~	124	,	2.43	2.47		
-	149					
7	196		2.44	2.53		
~	546					
2	293		2.45	2.58		
~	340					
~	387					
2	483		2.45	2.65		
~	581					
7	878					
~	176					
8	972		2.50	2.66		

		Ĭ	8.56	8.57		8.54		8.12	7.97		8.00		7.87		7.79	•		7.71				7.61
		N02 UGAT/L	0.43	0.41	0.33	0.29	0.50	0.68	0.54	0.21	0.07	0.03	C.14	C•05	0.03	0.01	0.02	00.0	0.54	0.02	00.0	C.01
		NO3 UGAT/L	6.21	6.61	7.53	8.50	8.67	19.41	24.38	26.47	29.26	31.19	32.01	32.25	32.28	32.39	32.38	32.27	31,95	34.94	38.91	44.53
	ER10D 3 NG 3658	SIO4 UGAT/L	0.75	0.38	0.13	0.88	1.38	12.80	96.02	21.46	21.71	21.84	24.60	26.73	29.87	32.25	35.89	49.20	62.00	06.69	77.94	95.13
	WAVE PERIOD SECCHI SOUNDING 3	P04 UGAT/L	69*0	0.73	0.83	0.88	0.0	1.97	1.99	.1.98	2 • 09	2.15	2.23	2.32	2.39	2.51	2.70	3.06	3.32	3.36	3.39	3.48
VALUES	000 EEC 099 GHT 26	0/0 02 SATN	107	101	106	104	102	21	17	22	17	12	11	12	12	6	ď	1	-	-4	e	4
OBSERVED VALUES	WEIND VEL	AOU UGAT/L	-27	-28	-24	-17	9	357	413	396	777	450	797	462	468	765	518	559	576	587	588	599
N 031	× × × × × × × × × × × × × × × × × × ×	02 UGAT/L										41.31	38•33	43.22	42.37	31.54	15.81*	0.81	0.21	1.49	3.02	15.17
STATION	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	438	438	432	427	419	66	98	112	98	63	96	61	63	94	56	m	4	7	16	22
CRUISE 026	10.3 27.8 7.92 92	SIGMAT	22.59	22.57	25.62	22.71	22.75	24.44	26.03	26.22	26.30	26•33	26.44	26.47	76.54	26.60	26.70	26.89	27.06	27.16	27.24	27.38
THOMPSON CF	EMP DRY	SAL 0/00	34.268	34.311	34.391	34.456	34.345	34.524	34.857	34.873	34.905	34.898	34.870	34.832	34.776	34.69B	34.728	34.655	34.605	34.575	34.562	34.564
T G THC		TEMP DEG.C	25.74	25.90	25.93	25.78	25.37	19.93	14.33	13.46	13.21	13.03	12.35	12.06	11.41	10.78	10.34	8.86	7.51	6.62	5.90	4.76
	01/02/68 0•6 10-13.0N 094-35.0W	DEPTH	0	01	19	56	39	64	73	76	122	146	195	544	262	340	388	482	578	679	714	973
	DATE LAUR LONG	CAST	~	~	~	~	-	-	-	-	-	-	7	2	7	7	7	7	2	7	7	8

		ğ	8.69	8.69		8.65			7.93		7.93		7.87		7.86			7.64				7.60
		NO2 UGAT/L	0.11	60.0	0.12	0.33	0.37	3.66	1.89	0.10	0.04	80.0	0.10	90•0	90.0	90.0	0.03	1.01	40.0	0.01	0.01	00.0
		NO3 UGAT/L	0.28	0.26	0.25	00•0	3.29	7.05	27.29	29.06	26.62	31.56	31.29	32.00	32.09	32.95	32.24	28.79	36.85	41.09	42.35	41.31
	ER 10D 23 NG 3640	SIO4 UGAT/L	1.51	0.88	1.38	1.63	1.38	4.14	21.08	24.10	24.72	24.97	26.48	29.37	31.00	33.38	40.79	54.72	66.51	73.54	80.57	97.89
	WAVE PERIOD SECCHI SOUNDING 3	P04 UGAT/L	0.29	0.31	0.32	0.56	0.59	96.0	2.31	2.18	2.23	2.35	2.30	2 • 36	2.37	2.52	2.81	3.09	3.26	3.32	3.33	3.38
VALUES	000 E	0/0 02 SATN	101	106	107	106	103		7	14	12	4	٠	•	01	7	1	0	7	7	m	9
OBSERVED VALUES	WEELS OF THE STATE	AOU UGAT/L	-27	-24	-26	-23	-10		458	437	450	767	473	477	481	503	940	564	580	588	588	585
032	× ₩₩₩	02 UGAT/L									44.45	12.15	31.11	29.71	34.89	22.35	2.21	0.59	1.02	24.4	10.03	22.40
STATION	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	429	427	459	459	419	345	32	73	79	50	47	20	52	36	•	7	•	•	18	38
CRUISE 026	9000	SIGMAT	21.81	21.86	21.88	22.06	22.19		25.74	26.17	26.28	26.34	26.41	26.50	26.57	26.64	26.73	26.94	27.10	27.19	27.28	27.39
G THOMPSON C	BARO 1013 TEMP DRY 29 TEMP WET 24	SAL 0/00	33.855	33.855	33.869	33.907	33.924	34.021	34.760	34.768	34.791	34.873	34.833	34.800	34.758	34.751	34.713	34.658	34.597	34.587	34.588	34.564
1 G 170		TEMP DEG.C	27.20	27.06	27.03	26.56	26.17		15.31	13.30	12.86	12.84	12.37	11.74	11.20	10.76	10.13	8.57	7.17	6.41	5.75	4904
	01/02/68 09-52-0N	DEPTH	0	91	02	30	04	8	2	8	124	149	201	251	298	347	396	\$64	565	669	900	1001
	2525 2525	CAST	-	-	-	-	-	-	7	-	-	-	~	8	~	~	8	~	7	7	~	7

CAST DEPTH NM43 ALK CO2 1 0 1.26 2.15 1 10 1.17 2.15 1 20 1.19 2.25 1 40 1.32 2.20 1 40 1.06 2.25 1 74 0.96 2.55 1 1.49 0.076 2.55 2 2.01 0.036 2.55 2 2.01 0.036 2.55 2 2.01 0.036 2.56 2 2.01 0.036 2.56 2 2.01 0.026 2.58 2 2.94 0.026 2.58 2 4.95 0.01 2.58 2 4.95 0.01 2.68 2 6.99 0.022 2.58 2 6.99 0.022 2.56 2 6.99 0.038 2.50 3 0.01 <th></th> <th></th> <th>I G THOMPSON</th> <th></th> <th>CRUISE 026</th> <th>STATION 032</th> <th>OBSERVED VALUES</th>			I G THOMPSON		CRUISE 026	STATION 032	OBSERVED VALUES
1 1 2 6 1 1 1 1 2 6 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	CAST		NH3 UGAT/L	ALK MEG/L	CO2 MMOL/L		
1.17 1.19 1.06 1.06 1.00 1.00 0.93 0.05 0.01 0.02 0.03 0.02 0.03 0.03 0.03 0.03	-	0	1.26		2.15		
1.19 1.32 1.06 1.06 1.00 0.93 0.22 0.38	-	2	1.17		2.15		
1 • 0 0 1 • 0 0 1 • 0 0 1 • 0 0 0 • 9 3 0 • 0 0 0 • 0 0 0 • 0 0 0 • 2 6 0 • 3 8	-	20	1.19				
1.32 1.06 0.96 1.00 0.76 0.35 0.22 0.38 0.22	-	30	3.07		2.20		
1.06 0.96 0.93 0.35 1.21 0.67 0.32 0.38	-	0	1.32				
0.96 0.96 0.93 0.35 1.21 0.67 0.32 0.38 0.22	-	20	1.06		2.29		
1.00 0.93 0.35 1.21 0.67 0.32 0.22 0.38	7	*	96•0		2.55		
0.93 0.76 0.35 0.67 0.32 0.38 0.22	-	66	1.00				
0.76 0.35 1.21 0.67 0.32 0.38 0.22	~	124	0.93		2.56		
0.35 1.21 0.67 0.32 0.32 0.38 0.24	-	149	0.76				
1.21 0.67 0.26 0.32 0.22 0.38	2	201	0.35		2.59		
0.67 0.26 0.01 0.22 0.38	7	251	1.21				
0.26 0.32 0.22 0.38 0.24	2	298	0.67		2.58		
0.32 0.22 0.38 0.24	8	347	0.26				
0.01 0.22 0.38 0.24	7	366	0.32				
0.22 0.38 0.24 0.42	~	469	0.01		2.68		
0.38 0.24 0.42	2	565	0.22				
0.24	2	669	0.38				
0.42	8	800	0.24				
	7	1001	0.42		2.70		

		7 G TH	THOMPSON	CRU1SE 026	STATION	N 033	OBSERVED VALUES	VALUES					
2555 2555	02/02/68 009-54-00 092-34-00N		BARO DRY TEMP DRY TEMP WET	10 10 10 10 10 10 10 10 10 10 10 10 10 1	WEATHER VISIBILIT CLOUD TYP CLOUD AMT		WAND VAND VAND VAND VAND VAND VAND VAND V	2000 HUUU HUUU HUUU HUUU HUUU HUUU HUUU	WAVE PERIOD SECCHI SOUNDING 3	ER100 2 NG 3576			
CAST	DEP1H	TEMP DEG.C	SAL 0/00	SIGMAT	02 UGAT/L	02 UGAT/L	AOU UGAT/L	0/0 02 SATN	PO4 UGAT/L	\$104 UGAT/L	NO3 UGAT/L	NO2 UGAT/L	£
-	•	27.03	33.959	21.95	430		-27	101	0.32		0.18	0.54	8.73
-	01	26.95	33.982	21.99	435		-31	108	0.43		76.0	0.11	
-	20	26.89	34.014	. 22.03	437		-33	109	0.35		1.05	60.0	
-	8	26.77	34.011	1 22.07	436		-32	106	0.35		96.0	0.11	8.42
-	\$	25.61	34.217	7 22.58	415		†	101	0.75		6.62	64.0	
-	64		34.321		187				1.57		19.75	0.68	
-	2	14.64	34.013		12		485	7	2.34		29.81	0.07	7.96
-	\$	13.22	34.798		*		470	60	2.30		30.31	0.03	
-	124	12.98	34.859	26.31	28		485	\$	2.30		31.58	0.02	7.94
7	148	12.59	34.837	7 26.37	39	23.16	478	60	2.37		31.12	0.02	
8	%	11.93	34.793	3 26.46	28	36.12	467	11	2.36		30.67	0.05	7.96
~	250	11.45	34.775	3 26.54	28		473	11	2.38		31.40	0.03	
~	300	10.94	34.747	7 26.61	31	21.93	206	•	2.52		33.11	00.0	7.87
~	347	10.40	34.727	7 26.69	7		536	-	2.79		32,19	00.00	
~	397	9.75	34.678	3 26.76	4	1.10	247	-	2.93		28.47	0.78	
7	495	7,93	34.629	27.01	ĸ	0.64	570	~	3.23		30.73	1.09	7.71
7	565	66.9	34.578		4	0.93	584	7	3.30		38.51	0.02	
~	695	6.24	34.585	3 27-21	15	8.20	583	m	3.20	04.69	38.77	90.0	
7	108	5.58	34.564	_	52	15.68	584	4	3.35	82.96	43.70	00.0	
~	1002	4.52	34.571	1 27.041	39	23.59	586	•	3.44	101.53	44.21	00.0	7.65

	ď	8.26	8.26		8.09		7.87	7.86		7.87		7.84		7.17			7.12				7.75
	NO2 UGAT/L	0.38	0.36	0.37	0.31	0.79	0.58	0.10	90.0	0.05	0.07	0.07	0.0	0.02	94.0	1.01	0.61	0.05	0.00	0.03	0.0
2010	NO3 UGAT/L	9.25	7.17	10.68	17.68	20.86	28.63	30.74	31.35	32.47	32.20	33.00	32.99	31.79	29.45	29.45	32.84	40.54	42.78	42.70	43.87
MAVE PERIOD 3 SECCHI SOUNDING 3576	\$104 UGAT/L	0.63	0.38	0.50	8.03	14.18	20.71	24.10	25.23	25.60	26.61	29.87	32.50	36.27	42.17	49.32	63.88	70.03	78.81	87.72	99.68
SE S	PO4 UGAT/L	0.78	0.83	96.0	1.47	1.84	2.33	2.35	2.35	2.35	2.38	2.48	2.54	2 • 72	2 • 83	2.98	3.26	3.28	3.33	3.36	3.40
VELOC 14 DIREC 07 HEIGHT 2	0/0 02 SATN	108	108	107	98	94	m	7	4	m	2	2	-4	-		0	0	-	2	6	60
MANUE DIRECTORY SAVE HEIGHT 077	AOU UGAT/L	-32	-31	-29	58	246	471	964	492	667	503	515	525	536	543	556	576	586	290	265	574
. × 	02 UGAT/L								11.35	8.97	7.56	6.63	1.44	1.23	0.42	0.30	0.72	3.70	5.95	10.62	34.34
WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	446	944	777	373	506	13	6	19	14	12	12	•	6		~	2	7	13	50	20
1014.95 236.99 76	SIGMAT	22.90	22.97	23.07	23.84	24.65	25.65	26.16	26.26	26.31	26.35	26.48	26.54	76.64	26.72	26.84	27.03	27.16	27.24	27.32	27.40
AFERD DATE OF THE PROPERTY OF	SAL 0/00	34.446	34.456	34.542	34.624	34.693	34.827	34.857	34.866	34.876	34.866	34.831	34.780	34.750	34.714	34.661	34.605	34.586	34.569	34.573	34.569
)	TEMP DEG.C	25.15	24.93	24.83	22.39	19.61	15.93	13.67	13.22	13.01	12.80	12.00	11.46	10.75	10.15	9.22	7.67	79.9	5 • 6 5	5.35	4.58
02/02/68 14.4 09-56.0N 091-15.0W	ОЕРТ Н	0	9	20	30	0*	20	2	100	125	150	102	252	302	352	403	503	709	202	906	1001
COACH NATURE	CAST	-	-	-	-	~	-		-	-		7	~	7	2	7	7	7	7	7	7

		T 6 THO	APSON CR	T & THOMPSON CRUISE 026	STATION 034	OBSERVED VALUES	UE S
CAST	0EP TH	NH3 UGAT/L	ALK MEG/L	C02			
	0	2.41	2.40	2.21			
~	01		2.38	2.24			
~	20						
~	30		2.38	2.31			
~	04	1.65					
 ~	90	0.32	2.39	2.43			
-	25	0.69	2.39	2.46			
-4	100	0.51					
-	125	0.40	2.40	2.52			
~	150	0.48					
~	201	0.45	2.40	2.50			
~	252	0.35					
~	302	0.30	2.40	2.46			
~	352	0.38					
~	403	0.50					
~	903	0.13	2.41	2.54			
~	\$ 09	0.19					
~	705	0.69					
~	908	0.22					
8	1001	0.33	2.44	2.57			

		£	8.24	8.23		16.7		7.90	7.95		7.90		7.88		7.85			7.74				7.76
		NO2 UGAT/L	0.22	0.21	0.20	0.18	0.03	95.0	0.14	90.0	0.03	0.03	74.0	0.02	0.01	00.00	0.01	0.07	00.0	0.01	00.0	00.0
		NO3 UGAT/L	12.22	12.10	11.40	13.23	25.85	27.26	26.62	19.62	31.28	79.67	31.22	31.79	32.93	31.94	33.31	34.39	39.37	39.99	43.99	41.35
	WAVE PERIOD 2 SECCHI SOUNDING 3566	\$104 UGAT/L	0.88	0.25	6.27	5.77	18.32	22.97	22.46	23.47	25.23	25.10	27.86	29.54	32.76	37.78	43.92	55.22	64.00	73.29	80.32	93.75
	SECCHI	PO4 UGAT/L	1.05	0.98	1.04	1.24	2.31	2.23	2.16	2.38	2.28	2.20	2.38	2.44	29.5	2.76	2.78	3.13	3+23	3.32	3.24	3.33
VALUES	VELOC 05 DIREC 05 DIREC 05 HEIGHT 1	0/0 02 SATN	106	106	104	95	20	ď	11	11	7	10	'n	10	7	m	-	-	-	2	4	6 0
OBSERVED VALUES	EEE DIS	AOU UGAT/L	-54	-23	-14	23	389	74	443	451	477	494	492	479	664	531	546	568	579	585	581	571
N 035	>m. ea×o.	02 UGAT/L										33.28	17.42	34.98	26.26	9.86	3.23	0.59	4.29	9.86	16.49	33.40
STATION 035	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	446	944	044	406	96	23	58	58	36	51	56	20	37	14	•	w	6	15	56	20
CRUISE 026	4884	SIGMAT	23.32	23.37	23.47	23.61	25.70	26.01	26.20	56.26	26.32	26.34	26.36	26.52	26.61	26.72	26.79	26.97	27.11	27.21	27.27	27.38
THOMPSON CE	BARO 1013 TEMP DRY 24 TEMP WET 23 REL HUMID	SAL 0700	34.499	34.509	34,493	340475	34+835	34,969	34,980	34.888	34,983	34.865	34.815	34.785	34.755	34.730	34.705	34.628	34.574	34.572	34.565	34.573
1 G 1HC		TEMP DEG.C	23.89	23.74	23.36	22.82	15.73	14.47	13.58	13,31	13.02	12.83	12.52	11.58	10.95	10.26	9.70	8.21	86.9	6.22	69.6	4.80
	03/02/68 203 09-57.0N 090-17.0W	DEP 7H	0	10	5 0	30	0,	20	75	100	126	151	201	282	302	352	403	503	\$ 0 \$	705	806	1001
	10A0A 10A0A N-10A	CAST	-	-		~	-	-	-	-	-	-	7	~	7	7	2	2	7	٧	7	~

		1 G 1HO	T G THOMPSON CRUISE 026	701SE 026	STATION 035	OBSERVFD VALUES	VALUE!
CAST	DEPTH	NH3 UGAT/L	ALK MEG/L	MMOL/L			
-	0		2.40	2.20			
m	10		2.38	2.25			
~	20						
-	30		2.40	2.44			
-	04						
-	000		2.39	2.50			
~	75		2.39	2.49			
7	100						
-	126		2.38	2.51			
-	151						
7	201		2.39	2.53			
~	252						
7	302		2.39	2.51			
~	352						
8	403						
~	503		2.40	2.57			
7	\$0						
7	705						
8	806						
7	1001		2.43	2.62			

,		ğ	8.12	8.12		8.15		7.92	7.88		7.87		7.85		7.79			7.71				7.73
		NO2 UGAT/L	0.21	0.17	C-17	0.15	0.03	0.48	60.0	0.03	0.02	0.02	0.02	0.01	00.0	0.00	0.01	0.27	0.01	00•0	00.00	00.0
		NO3 UGAT/L	15.72	15.55	16.43	16.32	25.35	27.76	29.75	29 . 89	29.23	26.45	31.20	31.51	29.12	32.86	32.85	30.45	34.19	35.80	41.60	36.56
	ER 10D 20 NG 3365	\$104 UGAT/L	12.80	12.30	12.30	13.05	20.46	20.96	21.84	21.84	22.59	23.84	24.72	29.54	31.50	34.89	39.66	52.46	62.12	68.52	75.80	91.36
	MAVE PERIOD SECCHI SOUNDING 3	P04 UGAT/L	1.32	1.33	1.31	1.33	1.96	2.10	2.21	2.26	2.25	2.25	2.29	2.45	2.57	2.65	2.91	3.38	3.29	3.27	3.30	3.43
VALUES	00000000000000000000000000000000000000	0/0 02 SATN	96	95	93	98	19	10	6 0	œ	7	01	a o	2	2	-	2	-		8	6)	w
OBSERVED VALUES	AVAND AVAND	ACU UGAT/L	19	23	62	63	395	177	794	997	471	664	473	515	525	532	537	295	578	576	585	585
980		02 UGAT/L								25.84		26.52	23.29		3.82	3.95	5.61	0.17	0.77	6.97	14.02	22.99
STATION	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	417	415	412	382	66	20	39	39	37	50	43	σ	6	7	10	m	m	19	17	34
CRU1SE 326	00 00	SIGMAT	23.97	24.08	24.17	26.32	25.83	20*92	26.13	26.20	26.25	56.29	26,36	26.02*	56.56	56.65	26.73	26.91	27.06	27.19	27.25	27.36
THOMPSON CRI	DRY 101 WET 2	SAL 0/00	34.575	34.585	34.599	34.617	34.904	34.917	34.916	34.899	34.917	34.911	34.865	34.2714	34.781	34.745	34.701	34.639	34.599	369.96	34.59C	34.572
7 G 7HO	BH-HAR REEPO LPP	TEWP DEG.C	21.81	21.44	21.16	20.64	15.37	14.56	14.05	13.68	13.47	13.28	12.75	12.11	11.37	10.70	10.07	9.56	7.48	6.52	8.9P	76.7
	03/02/68 6.5 10-06.04 089-26.08	ОЕРТН	0	10	20	30	9	20	75	100	125	150	198	248	297	346	396	465	565	769	761	766
	LOATE LOATE LONG	CAST	-	-	H	-	7	-	7	~	7	-	~	ħi	7	7	Ŋ	2	~	2	2	L1

7/10 % 703	2.33	2.31		2.31		5.45	2.44		2.46		2.46		2.51			2.56			
A PLK VEC/L	2.43	2.40		2.40		2.41	2.40		2.41		2.41		2002			2.43			
544 174400																			
DEPTH	C	C	53	30	24	e C	75	100	125	150	861	249	297	346	395	495	565	769	194
CA S7		pri	-1	P-4	-1	-	-		-	r-1	~	2	~	~	~	~	8	~	7

CBSERVED VALUES

		ď.	5.30	6.23		9.18		7.97	7.53		7.94		7.86		7.ÉC			7.75				7.75
		N02 UGAT/L	0.17	0.17	0.15	0.15	7.5.0	0.42	0.13	0.04	40.0	0.03	70.0	0.02	0.01	0.61	0.01	1.25	40 ° 0	00.0	000	0
		NO3 UGATZE	11.93	8.32	14.51	12.29	23.56	24.96	59.62	29.25	29.71	28.29	28.37	32.80	32.81	32.18	33.44	32.71	35.51	38.49	43.26*	00.00
	ER 100 2	5104 JGAT/L	9.73	10.75	11.60	10.42	16.94	20.46	21.53	22.59	23.22	24.35	25.46	27.86	30.62	32.76	35.64	53.84	62.75	58.77	26.71	6
	MAVE PERIOD SECCHI SCUNDING 3	P04 UGAT/L	1.05	1.11	1.24	1.32	1.94	2 • I B	2.53	2.52	2.22	2.32	2.36	2.45	2.52	29.7	2.70	3.13	3.41	3.4.	3.44	160
VALUES	1891 0000 1000 1000	370 02 SATA	8	95	16	4.8	52	œ	۲	σ	10	Q C	4	۲.	2	4	4	4	(F-1	0	4
GBSERVED VALUES	BYBB PANN CONN CONN TOOL	ACU UGATZE	w	19	33.	7.2	357	757	465	662	457	697	165	509	514	516	517	561	570	507	503	86.8
N 037	on×o-	02 USAT/L								40.12		35.87	15.57		16.37	16.23	10.24	3.72	1.44	5.57	7.12	72.63
STATION	######################################	92 UCAT/L	423	415	104	371	119	17	36	45	50	C#	2.3	pri pri	12	0	34	,	,••	٢	17	56
CRU:SE 326	- 4 m • • • m • • m • • m	SIGVAT	23.54	23.72	26.32	24.24	55.43	25.96	26.11	26.10	26.26	56.29	25.33	26.4	26.43	75.67	76.67	26.30	27.05	27.15	22.24	52.00
₹	######################################	SAL	34.739	34,385	34.507	754.45	£01.045	34.251	34.398	306.45	666.46	34.934	34.854	34.923	34.PC3	34.764	3 5	34.635	34.505	346.545	14.667	50,000
9	mr-r-or	16 PP 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	22.46	22.17	21.43	23.72	16.77	14.74	14.08	13.77	13.53	13.36	12.95	12.40	11.54	11.05	10.50	•	7.4.	5.6.5.1		. • 1
	04/02/68 10-00-00-00-00-00-00-00-00-00-00-00-00-0	05974	C:	: .* •••	\$ 7.7	£.	4ن	67	7.7	Ç	124	149	198	540	239	747	K (2	7.7	() ()	35.7	304	ë
	10A10 10A10 10A10 10A10 10A10	CAST	- -1	-	~	-1	r-4	+ 4	~1	-	-•	1	~:	۲	r	N	N	N	r	•	~	r

		7 7 THO	TIN THOMPSON CRUISE 326	920 JOIN	STATION 037	830~77 C3A4,080
CAST	26974	NH3	AEG/L	1770an		
~	C ,		2.31	7.25		
	CI.		2.31	2.29		
-4	53					
	30		2.31	7.31		
-	64					
	64		2.33	2.47		
-4	74		2.32	2.49		
	06					
-1	124		2.32	2.48		
-4	148			•		
~	139		2.33	2.49		
~	248					
~	298		2.31	2.45		
2	347					
~	397					
~	967		2.35	2.53		
7	596					
7	969					
7	196					
~	995		2.39	2.63		

		Į.	8.34	8.36		8.25		8.01	7.84		7.85		7.82		7.69			7.66				7.70
		NO2 UGAT7L	0.08	0.07	0.11	0.43	0.51	0.19	0.10	90.0	0.03	0.02	90•0	0.02	0.02	0.05	0.28	1.18	0.03	0.01	0.01	00.0
		NO3 UGAT/L	0.26	0.22	8.04	99.6	17.14	22.54	30.16	30.24	31.74	32.34	32.30	32 • 38	32.59	30.12	29.05	26.56	35.52	38.48	42.43	41.43
	ER 10D 3	\$104 UGAT/L	0.38	0.38	0.50	4.89	12.55	17.57	22.59	23.22	24.60	25.23	26.10	28.11	31.37	34.26	40.66	54.84	63.88	70.66	78.06	91.16
	WAVE PERIOD SECCHI SOUNDING 3	P04 UGAT/L	0.23	0.23	0.34	06.0	1.67	1.87	2.31	2.37	2045	2.39	2.41	2.44	2.58	7.04	2.81	3.11	3.29	3 • 32	3.40	3.40
VALUES	VELOC 20 DIREC 09 DIREC 07 HEIGHT 2	0/0 02 SATN	111	110	101	75	35	56	2	6	2	2	m	ю		7	-4	-	0	-4	7	7
OBSFRVED VALUES	WIND VEL	AOU UGAT/L	94-	-45	-27	112	293	353	487	064	498	200	503	508	524	532	541	299	581	589	593	576
3K 038	× × × × × × × × × × × × × × × × × × ×	02 UGAT/L						105.06	7.35	11.90		7.10	11.52		3.44	3.14	1.32	0.93	1.53	2.80	7.39	35.06
STATION	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	797	760	777	332	160	121	12	15	11	12	14	15	9	4	4	4	3	4	12	77
CRUISE 026	12.3 26.9 22.7 70	SIGMAT	22.33	22,35	22.37	23.70	24.54	25.61	26.02	26.18	26.26	26.30	26.39	56.46	26.53	29*92	26.72	56.94	57.09	27.17	27.27	27.39
THOMPSON CF	BAKO 101 TEMP DRY TEMP VET REL HUMID	SAL 0700	33.588	33.609	33.623	33.931	34.540	34.872	34.870	34.885	34.837	34.883	34.878	34.831	34.777	34.757	34.714	34.645	34.603	34.530	34.589	34.584
T G 7#		TEMP DEG.C	24.90	24.89	24.85	21.01	19.59	16.24	14.40	13.68	13,33	13.09	12.64	12.10	11.51	10.01	10.16	8.53	7.29	09*9	5.86	4.87
	04/02/68 16.2 10-04.0N 088-15.0W	DEPTH	0	10	20	30	¢0	20	75	100	125	150	198	548	29 ₆	345	394	490	265	169	261	991
	LONG RE	CAST	-	-	-	~ 4	-	-	-	-	-	-	2	7	7	2	7	7	2	7	7	7

		OH	NDSCN CE	TIC THOMPSON COURSE 324	STATIC1: 038	ORSERVED VALUES
CAS*	7,014	UCATZL	ALK が育らが上	7770.W		
	c		2.42	2.13		
**	13		2.38	2.13		
-	20					
-	ĴĘ		2.40	2.27		
-1	C4					
~	03		2.45	2.45		
-	75		2.45	2.52		
~	100					
1	125		2.45	2.52		
-	150					
~	198		2.44	2.57		
2	248					
~	767		2.44	2.55		
2	345					
2	394					
~	067		2.46	2.59		
2	265					
7	169					
7	792					
2	166		2.50	7.64		

		ď	8.22	8.22		8.03		7.85	7.85		7.86		7.83		7.79			7.69				7.75
		NO2 UGAT/L	0.13	0.13	0.36	C.22	0.27	0.22	60.0	0.02	0.03	0.02	0.03	0.01	0.07	64.0	1.15	1.04	0.03)O•0	0000	20.0
		NO3 UGAT/L	8.15	11.47	18.26	29.53	29.19	31.47	31.63	32.25	33.71	32.42	34.47	34.07	33.84	30.70	27.59	31.37	37.62	37.55	33.91	37.36
	ER 10D 2	\$104 UGAT/L	8.41	10.42	11.42	18.92	23.34	24.10	24.60	25.35	26.23	27.48	28.74	56.62	34.89	39.66	45.58	58.51	65.39	71.91	78.06	93.87
	MAVE PERIOD SECCHI SOUNDING 3	PC4 UGAT/L	0.74	96•0	1.50	1.86	2.28	2.38	2 • 35	2.42	2.42	2.42	2.44	2.50	2.63	2.91	2.96	3.21	3.30	3.33	3.43	3.41
VALUES	00 60 60 60 60 60 60 60 60 60 60 60 60 6	0/0 02 SATN	66	91	87	23	ď	2	3	2	2	2	EL.	2	-	-		0	-	-	^	•
OBSERVED VALUES	WEIND VERY AVE DIRECTOR	AOU UGAT/L	10	04	237	344	475	767	767	501	503	909	808	513	625	539	547	595	580	593	165	584
N 039	10×0\ ≻Lu	02 UGAT/L							13.51	7.61	6.67	8.46	10.45	7.52	1.61	0.93	C.55	1.10	1.32	æ?• 7	7.52	30.39
STATION	WEATHER VISIBILITY CLOUD TYPE CLOUS ANT	02 UGAT/L	412	392	217	133	56	12	15	6	12	11	14	12	4	4	4	2	4	9	1.2	35
CRU1SE 026	いかし や	SIGMAT	23.04	73.57	24.61	25.45	26.09	26.17	26.23	26.28	26.34	26.38	26.43	26.48	26.55	56•69	26.79	25.97	27.08	27.17	27.24	77.37
G THOMPSON CR	AARO 1011 TEMP DRY 255 TEMP WET 235 REL NUMIO	SAL 0/00	34.113	34.277	34.574	34.791	34.986	34.893	34.893	34.893	34.871	34.864	34.822	34.815	34.743	34.723	34.738	34.629	34.534	34.572	34.552	24.563
J+C 0 1+C		TEMP DEG.C	23.84	22.64	19.40	16.63	14.11	13.78	13.48	13.18	12.86	12.63	12.20	11.89	11.27	10,39	9.72	6.20	7.23	5.47	5.92	4.00
	05/02/68 2-5-5 10-04-0N 047-40-0N	CEPTH	0	13	22	Gé	Ć4	51	75	100	125	150	195	242	662	339	307	6.9	A,	11.	775	č 1.5
	2040 2040 2040 2040 2040 2040 2040 2040	CAST	-	-	-	-4		-	-		~	-	~	~	~	~	~	۲,	2	Ç.	2	2

	CAST DEPTH	TH UCATZE	ALK VEG/L	C02		
2.41 2.44 2.44 2.45 2.45 2.47	C		7.41	7.22		
2 · 6 5 2 · 6 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	10		2.41	2.28		
2.45 2.45 2.45 2.45 2.45	56					
2.45 2.45 2.45 2.45	33		2.45	2.41		
2	4					
2 . 4 5 2 . 4 5	50		7.44	2.52		
2.45	75		2.45	2.59		
2.45 2.45 2.45	100					
2, 45	125		2.44	2.51		
2.45	150					
2.45	195		2.45	2.58		
2.47	242					
2.47	290		2.45	2.55		
2.47	338					
2.47	387					
	482		2.47	2.56		
•	573					
P	677					
	775					
1907	972		2.47	2.61		

		ĭ	9.36	6269		7.95			7.94	7.92		1.90	7.89		7.83			7.73				7.17					
		NO2 UGAT/L	0.07	0.11	0.18	0.13	76.0	09•0	0.05	0.03	0.03	0.02	0.02	0.05	0.02	0.02	0.88	0.88	0.03	0.02	0.11	0.13	0.07	0.01	0.03	0000	0.01
		NO3 UGAT/L	2.91	8.13	22.43	28.53	27.81	28.40	31.13	30.52	28.38	30.07	31.96	32.98	29.92	32.25	27.32	28.79	26.19	38.89	42.04	40.88	35.34	37.43	36.78	37.26	36.72
	MAVE PERIOD 2 SECCHI SOUNDING 4518	\$104 UGAT/L	3.14	06.9	16.94	21.94	20.08	21.21	22.34	22.59	23.97	24.10	26.35	28.49	32.00	35.89	42.29	57.A6	65.01	73.17	82.45	68.89	145.83	149.39	149.09	148.72	148.22
	SECONI SOUNDI	PO4 UGAT/L	0.36	0.73	1.77	2.20	2.14	2.14	2.39	2.21	2.27	2.25	2.36	2.42	2.54	2.67	2 • 86	3.13	3.23	3.32	3.40	3.40	2002	2.75	2.73	2.74	7.07
VALUES	RECC SECONDA 1 GENT 1 343 1 44	0/0 02 SATN	102	81	35	10	16	12	œ	10	12	10	S	4	7	-	0	-	9	2	ev	6	32	36	36	3.6	36
OB SERVED	EXEMPLE SERVING VERY SERVING DIRECT SERVING SE	ACU UGAT/L	9	79	307	977	420	644	458	457	447	459	764	503	516	535	547	596	585	585	592	999	747	437	431	624	427
N 040	> w 0 1100-11-11	02 UGAT/L										43.73	22.18		11.30		0.72	0.76	1.66	10.03	13.64	29.75					
STATION	VISIBILIT CLOUD TYP CLOUD AVI	92 UGAT7L	407	343	166	51	080	62	4	25	49	54	56	22	13	4	2	4	7	13	17	57	215	737	737	533	539
CRU15E 026	30.17	SIGMAT	21.83	23.11	25.29	26.01	26.09	26.13	26.22	26.27	26.30	26.33	26.40	26.48	26.57	26.65	26.76	56.99	27.11	27.21	27.29	77.47	21.12	27.75	27.74	27.73	51.13
HOMPSON CR	EMP DRY 2 EMP WET 2	SAL 0/00	33.900	34.190	34.711	34.489	34.910	34.914	34.921	34.908	34.902	34.889	34.862	34.823	34.787	34.742	34.701	34.629	34.599	34.584	34.572	34.571	34.661	34.676	34.674	34.677	34.676
T G THO	∞⊢⊢ ~:	TEMP DEG.C	27.27	23.81	17.07	14.51	14.23	14.04	13.63	13.32	13,17	13.00	12.49	11.93	11.32	10.67	9.90	5°09	7.00	6.25	5.57	4.61	1.99	1.52	1.91	1.96	2.00
	05/02/69 16-1 39-54-0N 085-27-3W	DEPTH	ပ	CI	20	30	77	90	7.5	100	125	150	198	247	162	346	305	767	2 63	269	161	£56	27.79	3064	463₽	6007	4077
	LONG LONG	CAST	7	7	7	~	7	7	7	7	7	7	9	3	60	6,	•	6	6,	æ	E	61	-	-	1	-	

		•			7
CAST	SEPT.	123 UGATZE	ALK WFC./L	1/10mn	
^	c.		2.34	2.23	
2	ů.		2.36	2.30	
^	50				
2	Č.		2.41	7.54	
2	5.4				
~	26			2.59	
~	75		2.40	2.58	
^	100		2.40		
7	175			2.59	
2	150		29.2		
æ	199		2.42	2.62	
E	247				
6	162		2.41	2.66	
•	346				
m	395				
6	767		2.43	2.71	
~	593				
60	692				
60	191				
٤	666		2.47	2.73	

VALUES

		ā	8.15	8.03		7.83		7.83	7.82		7.82		7.75		7.71			7.66				7.65
		N02 UGAT/L	0.14	0.17	0.05	0.17	60.0	0°0	0.02	0.03	0.02	0.03	0.02	0.01	00.00	0.01	0.61	0.02	0.02	0.01	0.01	0.01
		NO3 UGAT/L	11.21	18.99	28.86	29.50	30.50	30.55	31,20	31.57	31.62	28.54*	31.20	31.84	32.36	32.26	29.36	33.47	38.76	40.16	41.97	42.35
	MAVE PERIOD 3 SECCHI 13 SOUNDING 3181	\$104 UGAT/L	9.91	14.43	20.21	20.58	20.96	22.34	23.59	23.84	24.85	25.35	27.36	29.62	32.25	36.39	45.93	55.85	63.88	71.16	80.45	96.51
	MAVE SECCHI	PO4 UGAT/L	0.98	1.647	2.13	2.16	2.28	2.29	2.29	2•31	2.33	2 • 36	2.36	7.44	2.59	2 • 71	3.13	3.14	3.23	3.27	3.37	3.43
VALUES	0000 H 00000 05000	370 02 SATN	89	59	01	12	œ	7	7	7	6 0	~	m	4	60	-	-	-	2	4	4	10
OBSERVED VALUE	WWW WIND VERY WAVE DIRE	AOU UGAT/L	50	187	977	441	464	463	474	475	473	419	505	503	517	534	546	267	574	572	584	563
N 041	× ω. Σα ο	02 UGAT/L								23.59	16.70	20.95*	11.01	15.64	4.67	3.78	0.21	89.0	4.46	16.79	17.25	42.63
STATION	WEATHER VISIBILIT CLOUD TYP CLOUD AMT	02 UGAT/L	386	569	52	58	38	36	35	36	0 7	36	15	22	15	7	7	4	13	52	23	9
CRUISE 026	06-1 ••• ••• ••• ••• ••• •••	SIGMAT	23.87	24.80	26.05	26.08	26.12	26.16	26.26	26.31	26.33	26.36	26.42	56.49	26.56	26.68	26.79	36.98	27.12	27.20	72.75	27.40
THOMPSON CR	EMP DRY 7	SAL 0/00	34.442	34.691	34.916	34.913	34.900	34.894	34.89₽	34.899	34.890	34.886	34.857	34.821	34.781	34.742	34.684	34.633	34.602	34.592	34.556	34.569
T G THO	E1E	TEMP DEG.C	21.81	19.02	14.42	14.26	14.02	13.81	13,35	13.09	12.97	12.84	12042	11,91	11.33	10.52	9.59	3.19	7.03	6.35	5.71	4.63
	11/02/69 14.6 08-54.0N	ЭЕРТН	ပ	10	20	30	64)	50	75	100	125	150	200	251	300	350	227	501	599	70.5	004	či:
	LCAUTE ON ON THE	CAST		-	-	-	~4	7	7	-		-	7	7	7	7	7	^	N	N	۷.	~

FERIOC 13 11.6 3383 CSTOL CAT/L CCAT/L 12.05 15.046 20.87 20.46 20.87 20.46 20.87 20.46 20.87 20.46 31.07 22.46 31.07 23.97 34.25 23.59 26.87 23.59 26.87 23.50 31.87 30.50 29.25 33.13* 37.18 39.03 37.42 79.94 45.61																							
To Thompson Crule: 026 Station 042 Checker Delice 1 Checker De			g.	8.C6	8.67		7.63		7.61	7.63		7.80		7.75		7.73			7.64				7.43
11,702,66 14,644 14,644 14,444			NO2 UCAT/L	0.29	0.17	0.29	9**0	0.11	0.05	0.03	0.03	0.02	0.02	0.02	0.01	00.0	0.00	0.02	1.15	0.02	00.00	00.00	
1,000,000 1,00			NO3 LGAT/L	14.88	15.20	18.74	20.87	26.28	34.03	31.06	31.07	26.87	34.25	30.54	31.87	29.25	37.18	32.85	32.35	37.42	42.72	45.61	7.40
11/2268		38	5104 UGAT/L	12.42	12.05	15.44	20.46	20.33	21.21	21.84	22.46	23.59	23.97	25.23	27.61	30.56	33.13*	39.03	54.22	62.50	71.16	76.67	65.76
11,02,68		SECOND SOUND I	P04 USAT/L	1.22	1.23	1.73	2.13	2.21	2.52	2.21	2.21	2.35	2.28	2 • 36	2.40	2.54	3.32#	2.76	3.09	3.27	3.32	3.45	2772
11,02,68	VALUES		3/0 02 SATA	1.6	66	51	11	œ	ı	01	7	10	7	7	9	m	8	α,	2	-4	4	S	a
11.702.68	CASERVED		ACU USAT/L	04	63	227	244	461	464	456	470	458	475	0.69	767	516	525	531	553	576	574	577	5.7.3
11,02/68 11,02/68 11,02/68 TEMP DRY 22,99 088-27,00% TEMP DRY 22,99 088-27,00% TEMP DRY 22,99 00 21,646 34,6599 24,609 10 20,65 34,6599 24,609 10 20,65 34,699 24,609 10 13,049 34,999 26,019 10 13,049 34,999 26,026 10 13,049 34,999 26,026 10 13,049 34,999 26,026 10 13,049 34,999 26,039 10 13,049 34,999 26,039 10 12,05 34,099 26,046 20 11,47 34,099 26,046 20 11,47 34,099 26,01 20 11,47 34,099 26,01 20 10,016 34,013 26,02 20 10,016 34,013 26,01	N 042	~	02 USAT/L									28.55	25.58	30.90	23.63	17.64	12.20	4.33	0.76	1.87	70.8	15.04	7.6
1 G THOMPSON CRUISE 026 11/02/68	STATIO	AEATHER VISIBILIT CLOUD TYP	32 UGAT/L	368	107	232	53	3.8	3.8	67	37	25	37	3.8	0.8	14	15	15	13	7	22	36	5.2
11,02/68 TEMP SON 11,02/68 TEMP DRY 12,000 TEMP DRY 12,000 TEMP DET 10,000 TEM	0	20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SIGMAT	54.09	24.23	24.24	25.98	26.10	26.15	26.19	26.26	26.29	26.32	25.39	56.46	26.54	26.61	26.72	26.92	27.08	27.18	77.27	27.39
11,02/68 0088=5400N 0088=5700N 1008=570		MP DRY 2	SAL 5/05	34.589	34.584	34.670	34.975	34.927	34.925	34.919	34.928	34.903	34.890	34.865	34.930	34.799	34.753	34.713	34.637	34.605	695.45	34.566	34.571
11/02 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S	TH+X	TEMP DFG.C	21.44	20.65	19.85	14.73	14.74	13.08	13.76	13.49	13.23	13.04	12.58	12.06	11.47	15.34	10.16	3.56	7.33	04.0	5.72	4.70
C C C C C C C C C C C C C C C C C C C		11/02/68 22-6 CP-59-0N JBR-27-0W	ЭЕРТН	c	13	٤	3.0	0.4	50	75	101	126	151	121	2÷7	275	345	394	473	205	505	193	295
		1 1 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	CAST	~		r4	-	-		-1	-	~	~	~	~	7	^	7	2	^	ĸ	^	c,

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CAST DEPTH "IH3 4LK CO27 1 7 2.39 1 17 2.39 1 20 2.42 1 20 2.44 1 40 2.44 1 50 2.44 1 101 2.44 1 101 2.44 2 2.43 2.44 2 2.45 2.44 2 2.45 2.44 2 2.45 2.44 2 2.45 2.44 2 2.45 2.44 2 2.45 2.44 2 2.45 2.44 2 2.45 2.44 2 2.45 2.44 2 2.45 2.44 2 2.45 2.44 2 2.49 2.48 2 2.49 2.50			1 0 THO	WPSC: CF	T G THOMPSCH CRUISE 026	STATION 042	OBSERVED VALUES	VALUES
10 20 30 40 101 1101 1101 1101 1101 1101 110	CAST		UGAT/L	ALK WF 5/L	7/70%A			
10 20 101 126 197 198 298 298 299	~	c		2.39				
20 40 50 101 126 197 295 396 493 697 995	-	13		2.42				
30 50 101 126 197 295 394 493 592 593	-	20						
63 75 101 126 1151 197 295 396 493 697 793		3)		2.43				
50 101 126 1151 197 295 394 493 697 793	-	Ç						
75 101 126 151 197 295 394 493 697 793	-	50		2.44				
101 126 151 197 295 394 493 692 793	~	75						
126 151 197 247 295 394 493 697 793		101						
151 197 247 295 394 493 592 697 793	-	126		2.44				
197 295 345 394 493 592 697	-	151						
295 396 396 493 692 793 995	~	197		2.43				
295 346 394 493 592 793 995	7	747						
3.65 3.94 5.92 6.97 7.93 9.95	~	562		2.44				
394 493 592 697 793	7	345						
493 697 793 995	2	394						
592 697 793 995	7	493		2.48				
697 793 995	2	265						
	^	692						
	~	193						
	2	966		2.50				

		ď	90.8	90.8	•	8.06		7.82	7.79		7.82	1	7.78	•	7.68				7.61	•				7.64
		NO2 UGAT/L	0.16	0.15	0.15	0.14	0.15	1.20	90•3	0.03	0.02	0.02	0.01	0.01	00.0	0.03	0.01	1.06	7.4°O	0.01	00•0	2000	0.02	0.01
		NO3 UGATZL	15.22	10,83	16,06	15.09	15.57	27.83	32.91	31.94	59.94	32.87	33.79	31.96	33.07	35.53	34.81	28.83	32.17	38.99	38.24	43.99	44.06	43.80
	MAVE PERIOD 3 SECCHI SOUNDING 3246	\$104 UGAT7L	11.57	11.45	11.94	11.69	11.94	21.31	22.05	23.14	22.90	23.87	26.80	27.65	36.33	33.37	36.00		55.66		63.70	72.59	79.41	95.86
	SECCHI SOURDI	PO4 UGATZL	1.30	1.673	1.26	1.28	1.30	2.15	2.29	2.37	2.20	2.32	2.43	2.41	2.48	2.60	2.73		3.12		3.28	3.30	3.30	3.32
VALUES	2885 2885 2885 2885 2885 2885 2885 2885	070 02 SATN	26	66	6	68	68	12	7	9	6	7	σ	œ	4	S.	3				~	~	80	7
OHSFRVED	EIND OFFERD OFFFRD OFFFTD OFFFRD OFFFTD OFFTTD OFFFTD OFFFTD OFFFTD OFFFTD OFFFTD OFFFTD OFFFTD OFFFTD OFFT	AUU UCAT/L	35	46	04	64	67	435	421	476	797	687	471	483	206	510	530		995		580	5.85	586	5.41
N 043	wo×on ⊁ka	UCAT/L								15.43	37.10	33.91*	21.25	22.10	16.91	15.43	8.63	1.32	65.0	2.38	68.7	7.61	14.58	34.13
STATION	VISIGILITY CLOUD TYPE CLCUD AMT	02 UGAT / L	405	403	405	393	394	53	2.2	30	17	2.2	77	62	23	28	16		4		2	6	2.1	41
CRUISE 026	7.00 9.00 9.00 9.00 9.00	SIGMAT	24.32	24.10	24.17	24.18	24.21	25.33	26.16	26.22	75.95	26.31	26.37	26.45	26.53	26.63	26.73		36.95		27.03	27.20	27.25	27.3A
THOMPSON CE	GARO 1010 TEMP DRY 22 TEMP WEY 21 REL HUMIE 2	SAL 6700	34.550	34.553	34.552	34.551	34.554	34.875	34.922	34.918	34.90R	34.897	34.870	34.831	34.793	34.751	34.713		34.626		34.594	34.577	34.561	34.557
1 0 TH	e F F &	TEMP DEG.	21.56	71.28	21.01	96*02	20.8P	14.23	13.92	13.63	13.35	13.13	12.72	12.15	11.57	10.82	10.13		9.30		7.19	9.34	5.71	59.4
	12/02/69 3.3 08-55.0N	9f PT4	c	01	טַּ	36	4	5 0	76	101	126	151	197	247	166	346	156	677	404	244	665	603	741	250
	0A01 0A01 0A014 0 0 0 0 0	CAST	-		-4		-4	~	~		-	-1	2	~	7	٧	۲.,	2	~	2	2	2	۲	2

		1 6 7 10	MPSON CH	T G THOMPSON CRUISE C26	STATION 043	OBSERVED VALUES
CAST	ЭЕРТН	HH3	ALK MFG/L	C02		
٠.	c					
-	10					
~	20					
	30					
~	04					
7	20					
-	76					
-	101					
	126					
~	151					
2	197		2.41	2.29		
2	247					
2	297		2.37	2.32		
7	346					
2	397			2.32		
7	445					
2	567		2.39	2.37		
2	244					
~	593					
~	663					
^	161					
•	0					

		r a	8.18	8.20		8.18		7.95	7.94		7.92		7.89		7.85				7.75					7.74
		NO2 UGAT/L	0.21	01.0	0.20	0.19	0.10	0.30	90.0	0.05	0.03	0.02	0.05	0.03	0.02	0.03	0.03	0.10	1.22	0.07	40.0	0.02	0.02	0.02
		NO3 UGAT/L	13,32	14.89	15.52	13.60	22.82	16*52	29.12	28.24	27.90	29.95	30.25	30.79	32.57	32.69	32.96	35.18	27.48	37.36	38.31	44.76	45.59	39.44
	MAVE PERIOD 3 SECCHI SOUNDING 3338	\$104 UGAT/L	66.6	10.11	11.21	10.84	16.93	19.00	21.56	55.65	22.29	23,26	25.70	29.14	30.21	34.23	38.12		53.23		65.77	72.47	81.24	60.46
	SECCHI SOUNDI	P04 UGAT/L	1.19	1.17	1.19	1.21	1.77	1.96	2.19	2.52	2.12	2.21	2.33	2.40	2.50	2.65	2.12		3.09		3.26	3.30	3.39	3.39
VALUES	2000 12000 2000 2000 2000 2000	0/0 02 SATN	66	86	96	96	30	21	11	Œ	12	12	0	2	3	e.	4		m		2	~	S	11
OBSERVED	EEE NO CEL	AOU UGAT/L	6	10	6	22	336	390	445	697	450	677	472	667	503	520	524		979		573	583	576	555
7 0 V	∞×o-	02 UGAT/L						88.91		28.26	46.92	50.49	27.92	11.52	12.45*	5.82	8.63	1.74	0.72	0.72	2.12	5.91	15.47	42.92
STATION	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	32 UGAT7L	423	425	456	717	147	104	58	38	65	63	777	28	26	18	21		19		13	15	30	4
CRUISE 026	₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩	SIGMAT	23.78	23.78	23.87	23.94	25.68	25.98	26.18	26.23	26.29	26.32	26.37	56.44	26.54	26.64	26.73		26.93		27.11	27.20	27.27	27.39
THOMPSON CR	SARO 1000 TEMP DRY 2 TEMP WEY 2 RFL HUMID	SAL C/00	34.499	34.498	34.509	34.523	34.881	34.908	34.922	34.918	34.913	34.904	34.872	34.847	34.834	34.756	34.724		34.647		34.598	34.578	34.565	34.570
T G THC	&	TEMP DEG.C	22.27	22.28	21.99	21.76	16.00	14.74	13.84	13.56	13,33	13.11	12.70	12.25	11.58	10.79	10.16		613		7.11	6.32	5.71	4.70
	12/02/68 10•1 08-55•00 089-34•03	DEPTH	0	c.	5.	56	39	64	73	66	122	146	194	546	293	343	393	774	667	643	265	669	£64	760
	PATE LONG LONG	CAST	-	 4	~ 1		-	-		,-4	-	-	۲,	2	2	7	7	Ç.	۸.	~	2	2	~	2

		T G THOMPSON		CPUISE 326	STATION 044	OBSERVED VALUES	VALUE
CAST	DEPT-	NH3 UGATZL	ALK MFG/L	C02			
-4	¢:						
	10						
-	13						
-1	53						
~	39						
-	87						
*	73						
1	99						
-	122						
-1	146						
2	194		2.36				
2	244						
8	293		2.36				
7	343						
2	393						
~	442						
2	663		2.39				
7	543						
7	265						
7	693						
7	193						
^	766						

		a L	E • 22	8.22		8.19		7.53	7.89		7.89		7.87		7.81				A1.1					7.17
		1.02 UGAT/L	0.20	0.18	31.0	C+17	60.0	74.0	6.36	70.0	0.04	0.05	0.03	0.03	60.03	90.0	0.03	0.14	70.0	0.03	60.03	0.03	0.00	3°3 0
		NG3 UGAT/L	11.40	16.91	11.00	13,93	22.43	76.95	30.14	30.73	30.89	29.53	30.74	33.23	33.21	30.58	31.81	32.58	33.83	34,38	35.93	45.54	42.23	39.73
	EH 100 3392	\$104 UGAT/L	1.10	1.22	1.46	5.12	16.56	19.61	21.63	25.09	22.30	23.87	25.33	28.52	31.30	37.51	41.53		53.35		89.79	71.50	78.93	20.38
	MAVE PERIOD SECCHI SOUNDING 3	204 UGAT/L	0.92	76.0	3.97	1.23	1.81	2.09	2.26	2.26	2.28	2.31	2•39	2.47	2.62	2.97	2.84		3.04		3.28	3.34	3.40	3.35
VALUES	0000 T 0000 0000 0000	370 02 SATN	105	105	104	95	36	13	-	no	7	7	\$	4	m	~	7		7			æ	4	91
CASERVED VALUE	MAND VELCO	AOU UGAT/L	-21	-21	-16	33	307	433	463	467	472	473	064	206	517	536	545		999		581	585	F 0 3	165
645 645		52 UGAT7L								25.88		24.14	17.13	14.92	11.73	1.53	3.14	1.74	0.39	2.12	2.08	7.27	18.74	56.82
STATION	WEATHER VISIBILIT CLOUD TYP CLOUD AVE	02 UGAT7L	747	777	439	369	170	99	36	0,1	37	38	2.7	19	16	4	۲.		7		7	16	56	65
CRUISE 026	12.7 23.5 21.1 31.1	SIGMAT	23.26	23.31	23.35	23.77	25.51	56.04	26.19	26.24	26.27	26.31	56.39	59.92	26.59	26.67	26.79		26.97		27.12	27.21	27.29	27.39
THOMPSON CF	BARO 101 TEMP DRY TEMP WET	SAL 0/00	34.483	34.483	34.476	34.533	34.854	34.919	34.929	34.926	34.915	34.902	34.879	34.823	34.780	34.748	34.699		34.634		34.596	34.582	34.569	34.575
7 6 740		TEMP DEG.C	54.04	23.86	23.72	22.41	16.63	14.47	13.82	13.57	13.36	13.13	12.64	11.92	11.19	10.60	6.69		8.26		7.01	6.24	5.54	4.71
	12/02/6P 16.6 08-55.0N 090-13.0W	ОЕРТН	0	10	20	30	() 4	50	74	66	124	149	202	762	305	355	907	457	507	550	609	711	A11	1012
	LOATE COATE	CAST		•	-	-			~	-	~	7	7	2	2	7	7	7	7	7	2	2	~	7

1 6		Ĭ	THOMPSON C	CRUISE 026	STATION	0N 046	OBSERVED VALUE	VALUES					
13/02/69 BARO 1012.9 09-00.0N TEMP WET 24.5 086-59.0W RFL HUMID 90	BARO 1012. TEMP DRY 24. TEMP WET 23. RFL HUMID 9	1012. DRY 24. WET 23.	112 234 239		WEATHER VISIBILI CLOUD TY CLOUC AM	R XI LITY 8 TYPE 1 A*T 1	WIND VERY VALUE OF THE LOT OF THE	200 600 600 600 1	WAVE PERIOD SECCHI SOUNDING 3	'ER10D 3000 NG 3036			
DEPTH TEMP SAL SIGMAT DEG.C 3/00	SAL SI	15	-		02 UGAT/L	02 UGAT/L	ACU UGAT/L	370 02 SATN	PO4 UGAT/L	\$104 UGAT/L	NO3 UCAT/L	NO2 UGAT/L	ď
0 23.90 34.343 27.19	3.90 34.343 27.1	.343 27.1	2.1		387		35	95	0.85	7.43	8.42	0.20	8.20
10 16.91 34.853 25.44	6.91 34.853 25.4	4.853 25.4	5.4		133		345	28	1.78	15.59	21.57	0.16	8.01
20 14,99 34,011 25,92	4.99 34.011 25.9	4.011 25.9	5.9		62		430	13	2.19	19.00	26.56	a0•0	
30 14.49 34.916 26.04	4.49 34.916 26	4.916 26	∙C		45		452	6	2.19	20.10	29.30	60.03	7.91
40 14.26 34.924 26.09	4.26 34.924 26	4.924 26	•		42		457	α	2.22	20.22	30.11	0.15	
50 14.02 34.918 26.14	4.C2 34.91g 26	4.918 26	9		36		994	7	2.22	22.29	27.88	0.11	7.88
76 13.70 34.921 26.21	3.70 34.921 26.2	4.921 26.2	6.2		4.5	30.60	694	6	2.79*	22.23	28.45	90.0	7.91
13.42 34.90B	3.42 34.908 26.	.908 26.	9		36	29.28	472	7	2.27	23.02	30.27	0.07	
126 13.18 34.903 26.30	3.18 34.903 26.	.903 26.	•		30	18.57	481	9	2.31	24.12	31.29	90.0	7.67
151 12.94 34.895 26.34	96 34.895 26	•895 26	•		36	22.86	477	7	2.30	24 • 36	26.92	60.0	
12.41 34.855	2.41 34.855 26	4.855 26	9			31.83	487	9	2.30	25.58	31.32	0.03	7.85
11.89 34.813	•89 34.813 26.4	.813 26.4	6.4			43.05	482	œ	. 2.30	27.16	29.14	0.02	
300 11-12 34-775 26-60	•12 34•775 26	4.775 26	•			11.56	523	2	2.59	33.74	32.10	000	7.82
350 10,36 34,732 26,70	•36 34•732 2	4.732 2	26.70			4.99	535		2.69	36.05	32.36	00.0	
400 9.68 34.698 26.79	92 34.698 26	92 869°	•			4.93	247	~	2.85	41.05	33.49	00.0	
450						1.64					31.01	00.0	
500 8.22 34.629 26.97	•22 34•629 26•9	4.629 26.9	6•9			0.04	571	0	3.24	55.54	28.86	0.17	7.72
550						1.27					36.35	00.0	
599 7.0P 34.602 27.12	•0P 34•602 27•1	•602 27•1	7.1			1.40	585	၁	3.24	63.46	35 • 3E	0.00	
699 6.27 34.581 27.21	7 34.591 27	.591 27	7			69.43	589	2	3.34	71.50	40.47	00.0	
9 5.46 34.571	•46 34.571 27.	•571 27•	7		5.8	20.40	582	5	3.47	19.6r	43.89	0.11	
998 4.51 34.575 27.42	51 34.575 27	.575 27	~		5.8	51.34	567	C	3.40	81.61	33.43	0.10	7.76

		Ţ	8.14					7.89	7.68				7.84		7.80		7.73		7.73		7.72			7.79
		NO2 UGAT/L	6.22	2.12	0.16	0.32	0.12	0.03	0.03	0.01	0.01	0.01	20.0	20.0	00.00	90°C	0.23	00.0	0.01	90°0	00°C	30.0	0.00	0.00
		NO3 UGAT/L	15.25	14.16	24.89	30.94	30.08	29.06	29.63	31.12	31.72	29.03	23.97*	31.66	33.49	16.62	89•82	38.22*	34.36	59.83	38.00	40.4E	42.65	40.66
	ER10D 3	\$104 UGAT/L	13.15	12.79	20.71	21.07	20.83	21.58	22.78	23.99	74.73	24.36	27.04	28.38	32.03	36.78	43.85		55.88		63.46	70.52	78.44	93.54
	WAVE PERIOD SECCHI SOUNDING 3	P04 U6A77L	1.19	1.23	2.15	2.18	2.17	2.20	2.44	2.26	2.34	2.28	2.47	2.44	2.67	2.75	2.96		3.18		3.21	3.30	3.36	3.42
VALUES	VELOC DIREC DIREC HEIGHT 31	0/0 02 SATN	96	8.7	15	6	o	7	6 0	7	7	0 0	2	4	-	-	0		0		7	4	'n	α
UBSERVED VALUE	TODA TODA TODA TODA TODA TODA TODA TODA	ACU UGAT/L	19	59	417	757	457	897	468	473	475	472	507	505	527	497	553		573		579	517	578	572
740 NG	> ₩	02 UGAT/L								28.09	15.68	29.66	12,32	20.31	7.14	3.65	0.47	2.17	0.30	65.4	9.05	21.63	18.27	47.13
STATION	VESTHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	413	387	73	45	77	36	39	36	37	42											30	53
CRUISE C26	0.450 0.450 0.450 0.450	SIGMAT	23.95	24.38	25.33	26.09	26.14	26.19	26.24	26.28	26.32	26.35	26.41	56.49	56.59	56.69	26.80		26.39		27.12	27.21	27.29	27.41
THOMPSON CI	BARO 1009 TEMP DRY 24 TEMP WET 2	SAL 0/00	34.612	34.610	34.863	34.914	34.919	34.922	34.913	34.900	34.892	34.893	34.852	34,813	34.764	34.726	34.690		34.626		34.597	34.579	34.564	34.573
T G TH	Φ ⊢ -α	TEMP DEG.C	22.35	20.40	15.24	14.29	14.03	13.79	13.53	13.29	13.02	12,39	12.44	11.86	11.12	10.39	75.6		8.07		7.00	6.23	5.61	4.57
	13/02/68 22.0 08-54.0N	DEPTH	0	10	20	30	04	50	76	101	126	151	200	250	302	352	704	157	205	555	603	703	803	1005
	PATE LONG	CAST	7	7	-	~	-		7	-	~	~	7	~	~	7	~	7	2	7	7	7	7	8

		T G THOMPSON	MPSON CR	CRUISE 026	STATION 247	OBSFRVFD VALUES
CAST	ЭЕРТН	NH3 UGAT/L	ALK MFG/L	C02 MMOL/L		
~	0		2.39	2.23		
-	10					
-	20					
-	30					
7	04					
~	20		2.44	2.38		
-	76		2.40	2.41		
-	101					
	126			2.41		
-	151					
~	200		2 • 4 2	2.40		
7	250					
7	302		2.41	2.45		
7	352					
7	402		2.45	2.46		
8	451					
7	205		2.43	2.49		
^	255					
7	603		2.43	2.50		
2	703					
7	603					
2	1005		2.47	2.57		

		ĭ	8.13					7.69	7.87		7.89		7.84		7.81		7.76		7.73		7.69			1.11
		NO2 UGAT/L	0.26	02.0	0.28	0.59	0.23	0.23	90.0	0.08	90•0	3.05	0.11	0.01	2.01	00.0	00.0	11.0	0.57	70.0	0.01	00.0	00.0	10.0
		NC3 UGAT/L	16.51	15.85	26.81	29.21	30.45	30.32	30.81	31.89	30.87	31.52	31.06	32.62	33.31	32.86*	31.53	32.97	34.56	36.54	38.39	41.81	43.24	45.88
	MAVE PERIOD 4 SECCHI SOUNDING 3365	\$104 UGA 77L	11.33	11.94	20.34	20.58	21.07	21.31	22.05	22.53	23.51	53.99	26.67	28.14	31.06	32.16	40.19		57.73		89.49	72.84	81.24	96.71
	SECOND SE	P04 UGAT/L	1.47	1.41	2.38	2.20	2.16	2.20	2.25	2.25	2.25	2.25	2.41	2.42	2.56	**00*	2.90		3.18		3.31	3.33	3.46	3.61
VALUES	00 EC 003 647 36	0/0 02 SATN	7 6	91	40	12	01	œ	G D	σ	σ	œ	4	4	e	2	a		0		o	7	4	7
OBSERVED	WIND VELOC WIND DIREC WAVE DIREC	AGU UGAT/L	28	0,	463	438	677	191	997	797	191	473	164	205	516	530	247		571		587	165	584	580
N 048	31×50	02 UCAT/L								37.06	31.32	30.81	20.91	22.40	14.32	10.01	1.27	0.55	2.29	2.80	2.51	9.18	16.15	40.88
STATION	WEATHER VISIBILITY CLOUD TYPE CLOUD AYT	02 UGAT/L	411	403	29	9	51	38	39	45	14	0.4											56	94
CRUISE 026	~0.00 0.00	SIGMAT	24.10	24.27	25.88	26.05	26.11	26.14	26.20	26.26	26.30	26.33	26.40	26.48	26.55	56.65	26.74		56.99		27.12	27.22	27.29	27.41
THOMPSON CF	BARO 101 TEMP DRY 2 TEMP WET 2	SAL	34.581	34.588	34.864	34.918	34.922	34.923	34.921	34.909	34.900	34.890	34.859	34.819	34.786	34.743	34.704		34.619		34.585	34.567	34.565	34.566
1 G TH	8 8	TEMP DEG.C	21.34	20.75	15.04	14.43	14.16	14.03	13.72	13.42	13.18	12.99	12.49	11.94	11.43	10.67	9.98		8.02		6.91	6.13	5.51	4.45
	14/02/68 6-5 08-58 N	DEPTH	0	07	20	30	0	%	25	100	125	150	201	252	305	353	403	453	204	554	603	705	805	1001
	LONG LONG	CAST	7		-	-		~	7	~	-	-	7	7	7	7	7	7	7	7	7	~	7	~

		T G THOMPSON		CRUISE 026	STATION 048	OBSERVED VAL	٧A۲
CAST	DEPTH	NH3 UGAT7L	ALK MEG/L	CO2 WMOL/L			
-	0		2.41	2.26			
-	10						
# 4	20						
-	30						
~	9						
	50		2.41	2.38			
-	75		2.41	2.39			
~	100						
-	125		2.41	2.43			
-	150						
~	201		2.39	2.41			
~	252						
~	302		2.41	2.42			
2	353						
^	403		2.40	2.48			
~	453						
~	504		2045	2.52			
^	254						
~	603		2.43	2.53			
~	705						
2	908						
~	1001		2.48	2.54			

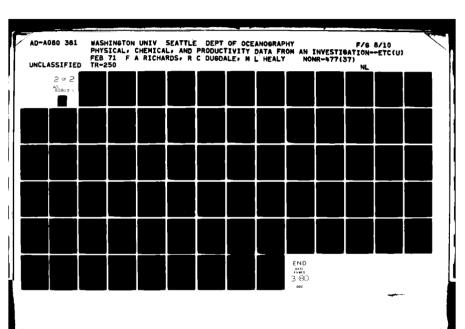
		ğ	8.13					7.90	7.88		7.87		7.83		7.80		7.75		7.71		7.72			7.72
		N02 UGAT/L	0.23	C.16	0.16	0.16	0.03	0.30	90.0	40.0	0.03	C.02	0.01	0.02	0.01	0.15	0.03	09.0	0.53	0.11	C.19	0.15	0.12	0.18
		NO3 UGAT/L	15.28	15.49	16.20	17.18	55.64	29.81	30.80	31.57	30.77	31.42	33.07	34.12	33.14	34.26	33.54	31.91	32.71	37.09	38.88	43.13	43.41	44.52
	ER100 3	\$104 UGAT/L																						
	WAVE PERIOD SECCHI SOUNDING 3	PO4 UGAT/L	1.28	1.26	1.37	1.43	1.92	2.12	2.22	2.23	2.24	2.26	2.39	2.48	2.63	3.57*	2.17		3.25		3.32	3.38	3.62	3.48
VALUES	VELOC 03 DIREC 07 DIREC 03 HEIGHT 2	0/0 02 SATN	4	76	06	78	54	15	11	6	10	01	m	m	w	7	-		•		0	-	4	10
OBSERVED VALUE	EEEE AVE DOING	AOU UGAT/L	14	28	94	70	375	427	644	794	458	197	667	906	916	523	538		695		585	592	583	564
640 NC	114 X1 VTF & 3	02 UGAT/L								30.56	39.61	38.55	17.21	17.93	16.45	11.77	7.82	2.97	0.93	3.36	1.70	5.82	12.41	47.05
STATION	WEATHER VISIBILI CLOUD TYS CLOUD AVI	02 UGAT/L	416	410	364	376	119	73	55	3 2	51	90											25	99
CRUISE 326	341 94.0 90.0 90.0	SIGMAT	23.77	24.03	24.12	24.39	25.96	26.10	26.18	26.22	26.27	26.31	26,38	26.48	26.58	56.66	26.73		26.97		27.11	27.20	27.28	27.40
THOMPSON CE	BARO 101 TEMP DRY 2 TEMP WET 2 REL HUMID	SAL 5/00	34.579	34.553	34.565	34.602	34.912	34.939	34.924	34.923	34.917	34,906	34.875	34.829	34.784	34.748	34.727		34.638		34.594	34.579	34.569	34.568
1 G TH		TEMP DEG.C	22.53	21.54	21.23	20.34	14.84	14.25	13.83	13.63	13.36	13.15	12.68	11.99	11.23	10.68	10.14		8.29		7.08	6.31	5005	4.56
	14/02/68 12-7 08-56-0N 089-08-0W	ОЕРТН	0	01	50	30	04	20	75	100	125	150	199	549	862	348	004	644	667	543	665	100	108	1002
	DATE HOUR LAT LONG	CAST			-	~	~	~	-4		-	~	7	~	7	2	2	2	2	~	~	7	7	~

		1 6 140	MPSON CR	T G THOMPSON CRUISE 026	STATION 049	OBSERVED VALUES
CAST	ОЕРТН	NH3 UGAT/L	ALK MEG/L	C02		
~	0		2.38	2.21		
-	10					
-	90					
-	30					
1	04					
-	20		2.38	2.35		
-	75		2.38	2.37		
-	100					
-	125		2.38	2.38		
-	150					
7	199		2.38	2.46		
7	546					
~	298		2.39	2.43		
7	348					
2	400		2.42	2.46		
7	644					
7	664		2.41	2.53		
7	675					
7	666		2.44	2.55		
~	7.00					
~	108					
7	1002		2.47	2.57		

		ğ	8.18					7.95	7.89		7.87		7.83		7.77		7.75		7.71		7.71			7.76
		1.02 USAT/L	0.21	0.18	0.20	60.0	C • 2 0	84.0	60.0	90.0	0.0	0.03	C.03	0000	30.0	00.0	00.0	1.01	1.11	70°0	6.01	00.0	0.01	0.02
		NO3 UGAT/L	12.78	11.21	13.42	23.82	24.97	25.37	25.89	29.78	31.56	30.52	31.11	31.18	31.01	33.62	33.41	27.49	29.07	35.17	39.28	39.50	32.68*	42.17
	ER10D 2	S104 UGAT/L	4.14	6.33	8.28	15.59	19.76	19.61	71.44	22.41	22.90	23.39	25.94	28.50	28.62	34.47	38.98		52.86		61.39	69.55	75.88	88.06
	WAVE PERIOD SECCHI SOUNDING 3	PO4 UCAT/L	1.50	1.07	1.23	1.73	1.91	2.01	2.29	2.31	2.32	2.36	2.40	2.54	2.50	2.87	2.80		3.20		3.33	3.38	3.47	3046
VALUES	000 000 000 000 000 000 000 000 000 00	370 02 SATN	109	101	103	41	26	22	QL)	~	av	6	9	2	~•	-	~		0		o	~	3	3
OBSERVED VALUE	EEEE VEL	AOU UGAT7L	-36	-29	-11	283	364	387	195	463	694	466	\$00	513	527	488	543		695		586	265	587	265
050 N	ეთ ა × .≻ພ	C2 UGAT7L								19.97	28.90*	25.24	16.36	10.71	4.25	5.86	5.78	4.55	0.34	1.87	1.44	7.56	16.66	41.52
STATION	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	463	453	777	193	130	112	77	38	39	45											23	56
CRUISE 026	2002 2004 2006 2006 2006	SIGMAT	23.46	23.58	23.78	25.49	25.95	26.37	26.18	25.22	25.27	26.31	26.38	75.67	26.57	26.67	26.75		56.95		27.12	27.21	27.29	27.40
THOMPSON CF	BARO 101 TEMP DRY TEMP WET	SAL C/00	34.425	34.451	34.511	34.850	34.896	34.911	34.928	34.931	34.913	34.903	34.974	34.830	34.794	34.739	34.713		34.636		34.594	34.574	34.564	34.571
7 G 7H	0 F F &	TEMP DEG.C	23.20	22.86	22.31	16.68	14.80	14.30	13.25	13.65	13.36	13.16	12.57	12.02	11.35	10.54	96*6		8.35		7.03	6119	5.50	49.4
	14/02/68 17.68 08-55. 8	DEP TH	0	10	20	30	04	50	75	101	126	151	5 0 5	253	303	353	405	456	\$06	557	209	710	811	1012
	HOUR LONG	CAST		~	~	7	-		-	7	7	7	E	۳	3	æ	6	æ	m	~	3	6	9	•

		T 6 THO	MPSON CF	T G THOMPSON CRUISE 026	STATION 050	OBSERVED VALUES	VALUES
CAST	DEPTH	NH3 UGAT/L	ALK MEG/L	C02			
-	0		2.37	2.24			
-	01						
-	20						
~	30						
-	04						
-	\$0		2.40	2.36			
~	25		2.39	2.46			
~	101						
~	126		2.39	2.46			
~	151						
6	202		2.39	2.47			
m	253						
6	303		2.40	2.47			
w	353						
E	405		2.40	2.50			
w	456						
e	506		2.45	2.56			
60	557						
w	109		2 • 42	2.56			
EU	710						
6	811						
6	1012		2.45	2.60			

	ď	8.23					7.93	7.92		7.93		7.87		7.83		7.78		7.74		7.73			1.17
	1.02 UGAT/L	0.17	0.15	0.15	0.11	90.0	67.0	C.03	0.01	0.01	00.0	0.05	0.01	00.00	0.02	0.01	0.82	0.02	0.01	00.0	000	C.02	00.0
	NO3 UGAT/L	10.00	10.48	11.83	14.39	20.40	25.74	29.72	28.77	29.53	31.19	31.55	30.75	31.01	30.95	32.35	27.97	30.86	33.61	37.61	39.16	39.69	36.05#
ER10D 3 NG 3272	SIO4 UGAT/L	3.04	3.41	2.68	10.60	12.79	19.49	21.56	22.41	23.75	23.99	27.16	29.23	33,13	38.98	41.66		53.10		64.19	10.40	77.46	91.96
WAVE PERIOD SECCHI SOUNDING 3	PO4 UGAT/L	1.10	1.35	1.07	1.54	1.91	2.10	2.86#	2.55#	2.30	2.40	2.45	2.54	2.73	3.62#	3.34*		3.10		3.32	3.56	3.52	3.28
VALUES 0C 12 0C 07 EC 07 GHT 2	0/0 02 SATN	112	110	111	89	94	11	7	6	7	9	æ	m	~	~	~		ာ		ပ	~	4	11
OBSERVED VALUES WIND VELOC 07 WAVE DIREC 07 WAVE HEIGHT 2	AOU UGAT7L	-51	04-	-43	47	254	443	468	461	473	482	505	511	525	538	548		294		585	290	584	557
N X X 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	02 UGAT/L								30.17	24.73	21.16	13.47	15.17	11.13	1.57	3.10*	1.53	1.15	*65*0	2.80	6.97	15.21	57.59
STATION WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	C2 UGAT/L	471	394	466	396	214	53	35	45	37	30											23	99
UISE 026	\$16M/JT	23.21	23.24	23,38	24.18	25.23	55.39	26.15	26.22	26.27	26.33	26.40	26.50	26.61	26.68	56.79		56•92		27.11	27,19	27.27	27.39
THOMPSON CRUBARO 1000 TEMP DRY 2001 TEMP TEMP 2001 TEMP TEMP 2001 TEMP TEMP TO 2001	SAL 0/00	34.478	34.487	34.538	34.533	34.810	34.908	34.912	34.908	34.895	34.886	34.856	34.817	34.765	34.74C	34.699		34.637		34.592	34.575	34.570	34.573
P SEE SEE	TEMP DEG.C	24.18	24.13	23.79	20.83	17.66	14.66	13.94	13.58	13.28	15.99	15.49	11.83	10.99	10.49	9.70		8.42		7.03	96.36	5.12	4.69
14/C2/68 23*4 090=15.0W	ОЕРТН	0	10	50	30	04	20	7.5	100	125	150	197	247	596	345	396	944	964	546	565	169	197	1000
DATE HOUR LATE CONG	CAST	-	-	-	-	-	-		~	7	-4	~	2	~	7	7	?	7	2	7	2	~	^



		T G THO	MPSON CR	T G THOMPSON CRUISE 026	STATION 051	OBSERVED VALUES
CAST	DEPTH	NH3 UGAT/L	ALK MEG/L	C02 WMOL/L		
7	0		2.39	2.24		
1	10					
-	20					
-4	30					
7	07					
7	20		2.39	2.49		
~	75		2.41	2.49		
1	100					
1	125		5.44	2.52		
	150					
7	197		2.41	2.48		
7	742					
8	596		2.42	2.54		
7	345					
7	396		2 • 42	2.58		
7	944					
8	967		2.45	2.55		
~	946					
7	565		2.45	2.59		
7	269					
7	197					
~	1000		2.48	2.64		

		Ĭ.	8.22	6.11		7.98		7.93	7.93	7.91	7.93					7.81			7.17					7.78
		NO2 UGAT/L	0.19	0.14	90.0	0.20	0.12	0.01	0.02	2.03	0.03	0.0	0.03	0.02	0.01	0.01	00.0	0.08	0.78	0.03	00.00	0000	0.02	0.02
		103 UGAT / L	69.6	18.06	23.05	26.56	29.13	29.26	28.76	28.88	30.60	31.85	30.98	31.20	33.02	32.72	33.41	31.14	32.09	36.07	29.33	41.64	43.53	4.2.67
	ERICD 3	S104 UGAT/L	7.43	12.91	15.71	17.90	19.37	21.19	20.83	22.65	23.02	23.75	24.36	26.67	59.96	34.35	40.07		54.20		62.73	71.01	79,20	96.22
	SECCHI SECCHI SOUNDING 3	PO4 UGAT/L	3.86	1.41	1.73	1.93	2.16	2.14	2.13	2.19	2.21	2.30	2.39	2.34	2.50	2.65	2.81		3.11		3.21	3.45	3.35	3 • 33
VALUES	00 PH 100	070 02 SATA	36	56	36	22	11	11	12	6	6 0	4	•9	7	æ	1	1		3		-	2	S	10
OBSERVED VALUE	EXEE AVAND 1 OOK 1 OOK 1 OOK	ACC UGAT/L	16	202	325	396	446	644	445	465	470	667	887	067	515	535	976		570		585	583	531	566
7K 052	≽mi w×cv	02 USAT/L								33.70	33.06	12.79	31.45	35.40	17.72	6.97	5.69	0.85	1.32	1.70	3.57	10.41	17.21	47.39
STATION 052	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	32 USAT/L	399	258	167	111	55	24	61	43	41	21											28	9
CRUISE 026	1008.5 25.6 2483	SIGMAT	22.93	24.93	26.52	26.04	26.12	26.16	26.23	26.27	25.31	26.34	26.42	26.50	26.58	56.69	26.79		76.92		27.13	27.22	27.29	27.42
THOMPSON CR	SARO 100 TEMP DRY TEMP WET	SAL 07.00	34.364	34.733	34.915	34.912	34.923	34.932	34.927	34.909	34.907	34.884	34.655	34.922	34.782	34.734	34.695		34.628		34.595	54.579	34.573	34.569
1 G TH		TEMP	24.85	18.64	15.04	14.46	14.12	13.97	13.61	13.37	13.17	12.89	12.41	11.94	11.24	10.45	99•6		8.18		6.97	6.17	5.57	4.45
	16/02/69 08-68 087-10	DEPTH	0	10	50	30	0,	20	75	100	125	150	199	672	588	346	399	644	664	646	665	101	801	1002
	LOAU NAUR NAUR	CAST	-			-	-	-	-	-	7	~	7	2	7	~	2	7	7	2	2	2	2	7

		T 6 THD	T G THOMPSON CRUISE 026	UISE 026	STATION 052	OBSERVED VALUES
CAST	DEPTH	NH3 UGAT/L	ALK MEG/L	C02		
~	0		2.40	2.24		
-	01		2.41	2.35		
~	20					
-	30		2.42	2.42		
-	0					
-	20		2.41	2.45		
-	75		2.42	2.43		
-	100		2.42	5.45		
~	125		2.45	2.45		
-	150					
7	199					
2	549					
8	299					
7	348		2.43	2.52		
~	399					
7	644					
2	664		2.45	2.57		
8	540					
7	665					
7	101					
7	106					
7	1002		2.49	2.59		

T G THOMPSON CRUISE 026	T G THOMPSON CRUISE 026 STATION BARO 1009-0 MEATHER	CRUISE 026 STATION 1009-0 WEATHER	CRUISE 026 STATION	STATION			3	VALUES	4 × 4		,		
08-54 TEMP DRY 23.5 VISIBILITY 087-50. W TEMP 4ET 22.1 CLOUD TYPE 087-50. W PEL HUMID 899 CLOUD ANT	TEMP DRY 23.5 VISIBI TEMP 4ET 22.1 CLOUD PEL HUMIO 49	284 23-56 VISTRI	23.5 22.1 22.1 22.1 23.5 23.5 23.5 23.5 23.5 23.5 23.5 23.5	VISIBILI CLOUD AV	-4-	>W ∞×0	TODI LODI LODI LODI LODI LODI LODI LODI L	266 1047 266 206	SOCIA	SECCHI SOUNDING 3200	Λ α		
DEPTH TEMP SAL SIGNAT 02 DEGGC 0700 UGATAL	SAL SIGNAT	SIGMAT	SIGMAT	02 UGAT/L		02 LGAT/L	ACU USATZE	070 02 SATN	P04 UGA77L	S104 UGA 77L	NO3 LGAT/L	N02 USAT/L	ď
0 21.52 34.654 24.11 416	34.654 24.11	24.11	•11	416			21	95	1.14	12.30	16.03	0.15	8.15
10 17.68 34.738 25.17 273	34.739 25.17	25.17	•17	273			195	a a	1.40	13.40	18.98	0.03	
20 14.74 34.868 25.75 6	24.868 25.75	25.75	\$75	•			687	~	2.30	22.17	30.2P	0.19	
30 13.98 34.890 26.12 14	34.890 26.12	26.12	•12	14			4.98	W	2.24	22.29	31.45	29.0	7.87
40 13.HB 34.894 26.15 33	34.894 76.15	26.15	15	33			410	7	2.19	20.83	29.74	90.0	
50 13,70 34,916 26,20 46	34.916 26.20	26.20	.20	94			654	Φ	2.08	20.46	29.78	0.01	7.90
13.42 34.91P 26.	34.91P 26.26	26.26	.26	04			463	a,	2.04	21.44	30.65	0.02	7.91
100 13.25 34.907 26.29 30	34.907 26.29	56.29	62.	30		25.97	084	40	2.15	22.29	30.80	00.0	7.88
125 13.04 34.898 26.32 30	34.938 26.32	26.32	.32	30		25.75	482	40	2.19	23.63	30.83	0.01	7.89
	34.888 26.33	26.33	133	95		18.61	451	12	2.27	23.75	30.84	00.0	
12,39 34,958 26	34.958 26	56	26.42			8.63	511	7	5.25	25.31	32.47	0.01	7.84
11.74 34.816 26	34.816 26	76	26.51			13.09	514	7	2.32	28.26	32.60	0.01	
11.21 34.791 26	34,791 26	56	26.59			14.24	515		2.45	33.13	33.03	00.0	7.80
9.93 34.714 26.	34.714 26.	26.	•			0.26	248	•	2.76	39.95	32.36	0.12	
405 9 ₀ 07 34 ₀ 665 26 ₀ 86	34.665 26.	4.665 26.	٠			0.34	655	0	2.86	45.65	31.09	0.26	
						0.26					33.93	0.11	
507 7-54 34-618 27-05	34.618 27.	27.	•			1.27	578	0	3.09	57.85	34.18	0.02	7.74
						4.63					37.84	0.02	
6.81 34.599	34.599 27.1	27.1	7			10.84	583	2	3.16	64.07	41.16	0.15	
6.20 34.587	34.587 27	27	27.22			22.99	576	4	3.16	70.52	38.87	0.21	
5.62 24.573	34.573 27.28	27.28	.28	30		17.93	578	•	3.26	79.66	40.37	0.01	
1012 4.65 34.572 27.40 55	060 340572 27040	27.40	04.	55		42.46	696	o	3.31	94.76	42.73	0.05	7.75

		T G THO	WDSON C3	T G THOWPSON CRUISE 026	STATION 053	OBSERVED VALUES
CAST	ОЕРТН	NH3 UGAT/L	ALK MEG/L	400 CO)		
-	٥		2.43	2.26		
-	01					
~	50					
-	30		2.43	2.41		
-	04					
-	20		2.42	2.40		
7	75		2.44	2.40		
-	100		2.46	2.45		
-	125		2.44	5.49		
•	149					
ĸ	198		2.44	2.46		
6	250					
6	300		2.44	2.49		
•	354					
•	405					
•	456					
4	507		2.46	2.53		
4	557					
4	608					
•	708					
•	808					
•	1012		2.50	2902		

		T d	8.23			6.13		7.67	7.86	7.87	7.86		7.83		7.80				7.76					7.76
		NO2 USAT/L	0 - 16	C-13	0.18	2-17	1.16	95.00	0.02	0.02	0.02	0.02	70.0	0.03	0.01	0.71	1.32	1.43	1.02	0.01	0.01	00.0	00.00	0.01
		M03 UGAT/L	11.73	12.23	19.43	27.06	23.81	26.43	30.23	31.58	32.08	32.13	33.91	34.93	35.98	28.04	20.85	28.63	31.98	36.34	39.83	40.34	43.36	77.47
	ERICO 3	5104 96477L	8.16	8.34	10.23	12.67	15.96	20.34	21.56	22.29	22.29	23.14	26.19	29.74	31.91	39.10	44.46		58.22		65.28	73.93	8C.51	96.59
	MAVE PERICO SECCHI SOUNDING 3	904 JGAT/L	1.24	1.11	1.35	1.57	1.96	2002	2.51	5.49	2.48	2.35	2.85	5.49	2.58	2.80	2.95	3.04	3.21	3.20	3.25	3.35	3.41	3.30
VALUES	000 m	970, 62 SAT:	96	16	3/	11	98	•	•	sn.	9	•		0	o	0	ດ		Ö		o	-	•	C
GESERVED VALUE	AANJOD TOURED TOUR TOURD TOURD TOURD TOURD TOURD TOUR TOURD TOURD TOURD TOURD TOURD TOURD TOURD TOURD TOURD	ACU UGAT/L	11	12	108	131	360	475	6.6.3	486	181	785	513	926	535	546	954		5:5		5.9.8	565	655	996
4 054	0 00 00 N	52 USAT7L								14.66	21.39	22.91	7.56	1.49	1.70	0.68	0.93	0.93	0.69	1.83	2.00	6.50	11.73	60.63
STATION 054	VISIBILITY CLOUD TYPE CLOUD AVPE	52 UGAT/L	413	419	338	328	123	50	19	54	30	33											22	61
CRU1SE 926	250 250 200 200 200 200 200	SISMAT	23.59	23.64	24.25	74.27	25.67	25.93	26.21	26.27	26.32	26.35	26.43	26.51	26.60	26.73	26.92		27.02		27.13	27.23	27.31	27.43
THOMPSON CF	HERP DRY	SAL 0700	34.444	34.441	34.475	34.657	34.963	34.864	34.984	34.890	34.872	34.874	34.940	34.798	34.773	34.712	34.681		34.622		34.588	34.574	34.573	34.572
1 G 1M	2++a	TEWP SES.C	22.82	22.60	50.49	19.04	15.97	14.79	13.53	13.28	12.95	12.80	12.26	11.67	11.12	10.09	9.44		7.84		6.87	90•9	5.39	4.40
	16/02/64 19.8 09-30.0N 08-25.5%	DEP 1H	c	10	20	30	04	20	75	100	126	151	202	252	303	353	404	455	505	557	607	705	810	1001
	40 40 70 70 70 70	CAST	-	-	-	~	-	-	-	-	•	-	~	7	7	8	~	7	7	7	7	~	7	8

		T 6 THO	T G THOMPSON CRUISE 026	UISE 026	STATION 054	OBSERVED VALUES	ALUES
CAST	DEPTH	NH3 UGAT/L	ALK MEG/L	C02			
•	0		2.38	2.23			
-	10						
~	50						
-	30		2.40	2.31			
-	04						
-	50		2.41	2.44			
~	75		2.40	2.46			
-	100		2.41	2.46			
-	126		2.41	2.45			
7	151						
2	202		2.41	2.48			
7	252						
7	303		2.42	2.48			
7	353						
7	405						
7	455						
7	505		2.44	2.56			
8	557						
7	607						
~	708						
~	810						
~	1001		2.48	2.60			

		Ţ	8.24	8.27		7.85		7.85	7.89	7.88	7.86		7.89		7.81				7.76					7.17
		NO2 UGAT/L	0.27	0.27	0.58	86*0	60.0	1001	0.03	0.03	0.02	0.01	0.01	0.02	0.01	0.01	0.45	1.29	0.12	00.0	00.0	00.0	00.0	00.0
		NO3 UGAT/L	9.57	8.81	26.28	27.31	29.83	59.59	30.56	31.02	31.45	31.25	32.18	33.05	33.14	31.84	59.89	28.18	34.13	34.41	39.20	41.14	43.49	43.83
	ER100 3	\$104 UGAT/L	0.97	00.00	17.42	21.68	22.05	22.17	22.53	23.26	23.51	24.24	26.55	29.60	33,13	37,39	42.75		53,71		63.09	16*69	19.90	95.86
	MAVE PERTOD SECCHI SOUNDING 3	PO4 UGAT/L	0.98	98.0	2.18	2.46	2.39	2.34	2.24	2.25	2.33	2.32	2.39	2.51	2.61	2.17	2.94	3.05	3.12	3.22	3.23	3.35	3.37	3.43
VALUES	VELOC 08 DIREC 08 HEIGHT 1	0/0 02 SATN	118	115	11	-	2	2	7	80	9	9	6	-	7	0	0		0		~	-	4	c r
OBSFRVED VALUE	WEINO VEL WAVE DIR	ACU UGAT/L	-78	19-	419	478	482	167	897	470	419	481	501	521	531	541	551		695		284	591	583	577
N 055	× МСж ТжОМ	02 UGAT/L								30.90	25.24	23.25	17.85	5.74	3.27	0.81	0.85	0.47	1.61	0.81	3.61	7.52	14.66	36.85
STATICN	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT /L	510	503	5 C	7	01	Φ.	38	39	32	32											56	47
CRU1SE 026	~~~~ ~~~~ ~~~~	SIGWAT	23.76	23.97	25.21	55.69	25.89	26.05	26.20	26.27	26.31	26.34	26.41	26.51	26.60	26.6R	26.79		26.97		27.12	27.21	27.30	27.41
THOMPSON CR	NO 100	SAL 0/00	34.545	34.511	34.750	34,831	34.864	34.876	34.913	34.913	34.906	34.893	34.859	34.814	34.778	34.742	34.696		34.634		34.601	34.579	34.572	34.573
T G THO	& <u>₩₩₩</u>	TEMP DEG.C	22.48	21.62	17,55	15.75	14.99	14.30	13,71	13,37	13,13	12.94	12.45	11.77	11.13	10.52	89.6		8.23		7.03	6.25	5.51	7.56
	17/02/68 09-00-04 088-29.0W	DEPTH	0	10	20	30	07	20	75	100	125	150	197	248	297	345	396	445	967	545	969	663	194	666
	LANCE REP	CAST	-	-			~	-	-	-		-	7	7	7	~	7	2	2	7	7	7	7	7

		T G THOMPSON		CPU1SE 026	STATION 055	55	OBSERVED VALUES	VALUES
CAST	DEPTH	NH3 UGAT/L	ALK MEG/L	C02				
	c		2.42	2.17				
-	10		2.42	2.21				
7	20							
4	30		2**2	2.41				
-	04							
-	20		2.42	2.42				
7	75		2 • 4 2	2.44				
-	100		2.43	2.43				
-	125		2.42	2.42				
-	150							
7	197		2.43	2.45				
2	248							
7	297		2.44	2.48				
7	345							
~	396							
2	445							
2	967		2.43	2.55				
7	545							
7	294							
7	669							
7	194							
7	666		2.50	2.55				

		ğ	8.18			7.93		7.82	7.17	7.78	7.77		7.64		7.60				7.51					7.51
		NO2 UGAT/L	0.11	0.10	60.0	0.07	0.43	90.0	90.0	0.10	0.05	0.02	0.02	0.02	0.02	0.03	0.03	0.02	69.0	0.02	0.03	0.02	0.03	0.05
		N03 UGAT/L	4.89	23.26	19.03	21.95	27.61	30.51	31.41	29.95	31.26	31.45	32.21	32.25	33.05	33.75	32.70	32.08	31.92	37.46	38.96	41.54	41.91	42.35
	ER 105 3	\$104 UGAT/L	4.75	4.75	10.72	15.35	19.61	20.22	20.95	20.34	21.68	22.53	24.85	26.43	29.72	34.59	40.19		53.10		61.14	69.55	79.29	96.83
	MAVE PERIOD SECCHI SOUNDING 3	P04 UGAT/L																						
VALUES	VELOC DIRECT DIRECT HE IGHT OF	0/0 02 SATA	105	104	95	3	12	a u	7	10	60	7	3	4	7	0	Э		0		7	7	4	^
DESERVED VALUE	WENT WENT WENT WANTED WENT WANTED WAN	ACU UGAT/L	-18	-15	54	248	441	760	471	457	470	416	204	505	520	536	549		567		511	587	583	578
950 NO	ω κ ω.	02 UGAT/L								49.54	29.28	27.45	13.68	20.44	9.73	2.68	0.68	1.02	1.23	3.78	8.20	10.41	19.63	41.31
STATION	WFATMER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	433	434	420	225	5.8	24	35	5.1	0,7	36											52	4.7
CRU1SE 026	2331 2331 2331 2331 2331	SIGWAT	27.71	22.95	24.31	25.32	26.11	26.16	26.22	26.25	26.23	26.32	26.38	26.45	26.54	26.65	26.17		56.94		27.10	27.20	27.28	27.41
THOMPSON C	REFERENCE DE LE	SAL 0700	34.200	34.256	34.603	34.773	34.931	34.928	34.918	34.911	34.909	34.892	34.856	34.836	34.790	34.751	34.708		34.632		34.600	34.575	34.569	34.570
10 T		TEMP DEG.C	25.15	24.50	20.65	17.18	14.71	13.94	13.61	13.44	13.27	13.02	12.59	12.14	11.51	10.71	9.87		9.42		7.19	6.30	5.61	4.57
	14/02/68 08-30 N 088-25 N	DEPTH	O	10	5 0	30	9	2 C	75	100	125	150	701	252	301	350	104	154	205	551	209	703	804	1004
	10A 10A 10A 10A 10A 10A 10A 10A 10A 10A	CAST	-	-	-	-	-		~	-	-		2	2	7	~	2	2	^	7	2	7	~	7

		T S THO	T G THOMPSON CRUISE 026	01SF 026	STATICN 056	OBSERVED VALUES
CAST	НГазс	NGAT/L	ALK PEG/L	C02		
-	0			2.15		
	01					
~	53					
-4	30		2.43	2.36		
-	64					
~	50		2,43	2046		
-4	75		2.43	2.46		
-	100		2.43	2.45		
-	125		2.43	2.45		
-	150					
2	162		2.44	2.49		
2	262					
~	301			2.47		
7	350					
7	107					
7	157					
2	205		2.46	2.54		
7	551					
7	209					
7	103					
7	404					
7	1004		2.50	7.61		

		ī	8.11			7.77		7.84	7.81	7.78	7.79				7.70				7.64					7.65
		NO2 UGAT/L	0.26	0.26	0.26	0.22	99.0	0.41	90.0	90.0	0.05	60.0	90.0	90.0	90.0	0.05	60.0	0.89	0.0	0.05	0.05	90.0	0.05	0.05
		NG3 UGAT/L	11.00	11.63	14.70	29.36	28.07	28.00	29.52	30.83	31.00	32.05	32.38	32.42	33.69	33.10	30.84	30.00	34.96	37.22	39.28	41.51	43.69	43.86
	ER10D 3	\$104 UGAT/L	3.65	3.17	7.67	18.51	19.00	19.37	20.83	21.68	21.92	22 • 90	24.85	26.67	29.96	34.47	42.75		53.47		63.09	71.13	19.66	95.73
	MANE PERTOD SECCHI SOUNDING 3	P04 UGAT/L																						
VALUES	GC 03 GHT 02 GHT 22	0/0 02 SATN	101	108	66	9	15	10	7	\$	•	9	\$	4	3	-	O		0		٥	1	4	6 0
OHSERVED VALUE	ENTRO OF THE PROPERTY OF THE P	A60 USAT/L	-30	-31	54	664	425	451	471	485	481	187	465	505	517	535	551		571		585	591	584	574
N 057	× × ≻ա	02 UCAT/L							19.25	16.45	15.00	20.95	73.67	20.78	14.66	7.27	1.66	0.81	1.23	2.59	2.89	8 • 54	18.49	43°09
STATION	WEATHER VISIRILITY CLOU' TYPE CLOU' AMT	02 UGAT/L	194	794	416	2.7	73	51	34	23	59	32											25	51
CRU15E 026	~~~ ~~~ ~~~	SIGMAT	23.73	23.73	54.09	25.73	56.04	26.13	26.21	26.25	26.29	26.33	26.40	26.49	26.57	26.68	26.80		26.98		27.12	27.21	27.29	27.41
THOMPSON CR	TEMP DRY 2	SAL 0700	34.547	34.549	34.551	34.853	34.834	34.918	34.925	34.917	34.900	34.892	34.953	34.815	34.791	34.730	34.690		34.625		34.589	34.575	34.564	34.563
T G THO	a.⊬⊢o. ∢mmm	TEMP CEG.C	55.59	22.57	21.30	15.68	14.38	14.07	13.69	13.43	13.22	12.97	12.47	11.98	11.30	10.48	9.59		9.11		96•9	6.21	25.52	4.50
	17/02/68 11.8 08-53-0N 088-50-0W	DEPTH	0	10	50	30	¢.	53	75	100	125	150	200	250	562	348	336	677	667	548	865	869	793	666
	LACE LONG LONG	CAST	-	-		-	-	-	-	-	-	-	2	2	٧	2	2	2	2	2	2	~	2	7

		T G THOMPSON	APSON CR	CRUISE 026	STATION 057	OBSERVED VALUES
CAST	DEPTH	NH3 UGAT/L	ALK MEG/L	CO2 MMOL/L		
-	c		2 • 39	2.27		
-	10					
1	20					
	30		2.45	2.45		
	04					
-4	50		2002	2.46		
-	75		2.42	2.51		
-	100		2.43	2.48		
	125		2.45	2.48		
-	150					
2	200			2.48		
~	250					
~	599		2.43	2.52		
7	348					
2	399					
2	644					
2	664		2.43	2,52		
7	548					
7	865			2.58		
7	869					
7	198					
7	666		2.48			

															•									
		£	8.16			7.89		7.87	7.84	7.81	7.19		7.75		7.71				7.65					7:
		MO2 UGAT/L	0.24	0.24	0.27	0.14	0.83	0.18	0.05	0.03	0.02	0.02	0.02	0.02	1000	0.0	0.01	88	0.0	0.02	0.0	10.0	10.0	0.62
		MO3 UGAT/L	7.83	7.91	17.76	25.20	27.33	28.86	29.53	30.43	31.07	31.66	32.46	32.76	33.06	32.98	32.47	30.90	32.97	36.71	38.35	39.78	42.98	43.60
	ERIOD 09 NG 3329	S104 UGAT/L	0000	00.0	10.23	18.03	17.78	18.76	20.34	20.46	21.31	22.78	25.33	27.89	36.94	35.44	47.04		57.00		53.46	71.62	19.66	93.30
	SPECCHI SECCHI SOUNDING	PQ4 UGAT/L	0.78	0.79	1.61	1.94	2.11	2-15	2.25	2.23	2.31	2 • 35	2.40	2049	2.57	2.71	76.2	9°09	3.22	3.26	3.30	3.32	3.40	3.40
VALUES	Opmm HOO F OUU1 Opmm HOO	5/0 02 SATN	116	116	99	52	13	12	o.	12	7	•0	(4)	191	17	-4	J		O		O	174	m	4
CBSERVED	#### ################################	400 USAT/L	168	-67	184	367	430	440	463	447	478	484	503	511	525	537	155		575		587	585	587	297
25.0	MC/GPM	02 JGAT/L								43.69	35.32	27.54	15.34	15.00	11.09	5.52	5 6 7	1.15		C.47	2.89	12.49	12.03	41.86
STATION	######################################	02 UGAT/L	495	964	268	122	67	6.1	46	62	33	m											52	92
Ceutse 326	Φ(~ O\n • • • • • • • • • • • • • • • • • • •	14,518	23.48	23.55	24.53	25.84	26.03	26.12	26.21	26.26	26.30	25.34	25.40	25.53	25.53	58.69	26.73		27.30		27.13	27.19	27.27	27.39
THOMPSON CA	48887 0.425 0.425 0.425 0.425 0.425 0.425	2AL 0700	34.439	34.436	34.624	34.48	34.913	34.912	34.910	34.911	34.905	34.993	34.954	34.911	34.775	34.729	34.686		34.659		34.584	34.567	34.566	34.565
¥1 0 1	n:+-m	7540 356.0	23.17	25.92	19.66	15.29	14.51	14.10	13.69	13.40	13.18	12.89	12.49	11.81	11.20	66.01	69.6		7.93		4.97	5.30	5.12	4.63
	17/02/68 19/08/68 089-26.34 089-26.34	DEPT.	v	51	22	30	0	50	7.5	130	125	150	200	252	332	355	£ 33	254	534	554	409	736	\$0.6	1011
	44477 40477 70778	CAST	-	м	**		-	н	,	~1	r (2	2	^	2	2	~	η,	~	~	7	17	~

	CAST	-	-	-4	-	-	-	-	-	-		~	~	7	~	2	~	7	7	7	7	~	,
	DEPTH	0	20	20	30	0	20	75	100	125	150	200	252	302	352	403	452	204	554	\$09	106	806	
T G 7HO	NH3 UGAT/L																						
MPSCA C	ALK MEG/L	2.39			2,42		2.43	2.44	2.42	2,42		2.41		2045				2.46					
T G THOMPSCN CRUISE 326	C05	2.18			2.37		2.45	2.42	2.44	2.46		2.45		2.50				2.58					
STATION 058																							
OBSERVED VALUES																							
VALUE																							

		g Z	8.15			8.02		7.80	7.81	7.76			7.76		7.72				7.65					7.67
		NO2 UGAT/L	0.18	0.17	0.18	0.16	0.08	74.0	0.05	70.0	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.02	94.0	0.11	0.01	00.0	00.00	00•0
		NO3 UGAT/L	9.61	9.20	11.38	15.18	20.22	26.88	30.63	30.93	31.49	31.96	32.60	32.77	32.51	32.51	33.06	33.13	32.82	35.69	39.91	42.10	42.73	43.24
	ER 10D 3	\$104 UGAT/L	00.0	67.0	1.58	7.43	9.50	16.69	19.98	20.95	22.05	22.65	26.07	28.50	31.91	35.93	39.83		53.47		63.09	66.49	76.61	91.84
	MAVE PERIOD SECCHI SOUNDING 3	P04 UGAT/L	0.76	0.78	66.0	1.53	1.65	5.04	2.52	2.27	2.28	2 • 34	2.37	2.50	2.66	2.73	2.84	3.08	3.13	3.24	3.29	3.32	3.34	3.32
VALUES	000 T 000 000 000	070 02 SATN	112	113	106	88	4	5	7	7	٠	•	2		0		ø		၁		O	8	S	10
OBSERVED VALUE	EEEE AAND COUC FEED TOUC FEED FEED FEED FEED FEED FEED FEED FEE	AGU UGAT/L	-51	-52	-25	53	240	614	468	471	478	481	505	521	535	533	548		572		587	290	578	558
650	ω×σ• - ω	S2 UCAT/L								56.09	20.91	18.62	12.75	5.27	2012	3.31	2.34	1.32	9900	0.25	1.44	90.05	20.78	51.04
STATION	XEATHER VISSIBILITY CLOOLO AYPE	02 UGAT7L	471	472	457	386	525	11	33	34	31	31											31	79
CRUISE 026	79 C C C C C C C C C C C C C C C C C C C	SIGNAT	23.17	23.18	23.67	24.06	25.11	25.83	26.19	26•19	26.25	26.30	26.39	26.51	26.59	56.69	26.77		26.98		27.11	27.20	27.23	27.39
THOMPSON CR	PE DRY 101	SAL 5730	34.440	34.445	34.440	34.540	34.791	34.888	34.904	34.905	34.897	34.883	34.850	34.814	34.770	34.726	34.698		34.619		34.583	34.566	34.570	34.566
1 G THC	4 il∭ii α⊶⊷n	TEMP CEG.C	24.24	24.22	22.51	21.38	18.08	15.31	14.13	13.74	13.42	13.08	12.51	11.77	11-13	10.41	9 · 18		9.12		66.9	6.22	9.56	69.4
	19/02/68 105 08-55-0N 090-12-0W	DrpTw	0	13	50	30	0,4	£0	7.5	101	126	151	202	253	304	354	507	957	505	556	605	707	867	1009
	LOAU NAUR NAUR	CAST	-4	-4	- 4	4	-4	7	-	r4	-	-4	7	7	2	7	7	~	7	7	7	7	~	~

		1 6 140	APSCA CA	T G THOMPSCH CRUISE 026	STATION 059	DESFRUED VALUES	LUES
CAST	DEP1	NH3	ALK VFG/L	C02			
	¢		2.40	2.21			
-	27						
-	20						
-	30		5.39	2.30			
- 1	64						
p4	\$0		2045	2.47			
-	75		2042	2.45			
-	101		2.40	2046			
-	126						
7	151						
8	202		2.39	2.51			
2	253						
8	304		2002	2.53			
~	354						
8	405						
8	456						
2	\$0\$		2045	2.60			
8	556						
7	609						
7	101						
8	108						
7	1009		2047	7.57			

		Ŧ	6.23			7.99		7.97	7.98	7.94	7.92		7.91		7.84				7.76					7.78	
		NO2 UGAT/L	0.17	0.12	90.0	0.07	0.13	0.10	0.03	0.02	0.02	00.00	0.03	0.03	0.02	0.02	0.01	0.17	0.76	0.0	0.01	0.01	00.0	10.0	00.0
		NO3 UGAT/L	8.78	14.55	22.25	27.58	28.82	29.27	29.30	30.65	30.95	32.10	31.36	31.86	33.51	32.00	31.25	30.59	32.28	35.13	34.49	41.34	42.78	42.60	42.65
	ER 10D 2	SIO4 UGAT/L	7.31	11.21	19.37		20.10	21.56	21.68	22.41	23.02	26.07	27.04	28.87	31.79	33.13	43.00		56.88		64.55	72.71	81.97	96.56	108.16
	WAVE PERIOD SECCHI SOUNDING 3	PO4 UGAT/L	0.93	1.23	1.66	2.03	2.15	2.10	2.14	2.20	2.26	2 • 39	2.36	2.36	2.56	2.59	2.95		3.25		3.27	3.35	3.40	3.42	3.32
VALUES	0890 14000 14000	0/0 02 SATN	16	99	4 1	15	12	11	13	•	60		•	6 0	3	7	0		0		-4	1	'n	11	13
OBSERVED VALUE	EEIND VELOCE EEND DIRECT MAVE HEIGHT	AOU UGAT/L	13	151	288	454	443	644	442	463	471	664	684	487	521	533	550		572		586	592	969	946	155
N 060	∞× 0^	02 UGAT/L								31.66	31.24	6909	29.75	39.74	14.11	8.71	2.55	1.91	1.44	1.40	3.82	8.46	20.61	61.15	
STATION	VESTHER CLOUD TYPE CLOUD ANT	02 UGAT/L	401	568	201	72	58	53	99	45	0*	15											30	69	98
CRU1SE 026	1009.2 25.6 26.9 10 94	SIGMAT	22.89	24.52	25.85	26.03	26.12	26.15	26.22	26.26	26.31	26.35	26.41	26.50	36.60	26.70	26.80		56.93		27.13	27.22	27.31	27.42	27.50
THOMPSON CR	BARO 100 TEMP DRY 2 TEMP WET 2 REL HUMID	SAL 0/00	34.391	34.612	34.906	34.922	34.933	34.929	34.924	34.915	74.903	34.890	34.853	34.807	34.771	34.761	34.689		34.622		34.592	34.576	34.573	34.574	34.588
T G THO		TEMP DEG.C	25.04	19.86	15.30	14.55	14.18	13.98	13.67	13.42	13.15	12.89	12.43	11.76	11.08	13.49	9.59		8.06		68.89	6.12	3.42	4.45	3.77
	19/02/68 107 08-52-0N 087-03-0W	DEPTH	0	10	20	30	0,1	20	75	100	125	150	202	252	373	353	4 04	454	504	554	* 0*	104	803	1004	1233
	A POLICE	CAST	-	-	-	-	-1	~1	-1	-	7	-4	~	2	~	~	7	7	7	~	8	~	~	2	~

		7 G THO	MPSON CE	T S THOMPSON CRUISE 326	STATION 060	CBSERVED VALUES	VALUES
CAST	DE914	NH3 UGAT/L	ALK NEG/L	C02			
~	0		7.41	2.23			
-	10						
-	02						
-	3)		2.44	2.47			
•	0.4						
~	50		2.62	2.48			
-	75		2.44	2.49			
~	100		2.43	2.50			
-	125		2.43	2.51			
-	150						
~	202		2.44	2.51			
~	282						
~	393		2044	2.54			
~	353						
~	404						
~	454						
2	204		2.46	2.59			
~	954						
2	409						
7	104						
~	603						
~	1004		2.51	2.66			
7	1203						

Second Color Col		1 G 1#	THOMPSON	CRU1SE 026		N 061	OBSERVED VALUE	VALUES					
5AL 51CMAT CARTAL CARTAL <th>19/02/68 8ARO 10:8 TEMP 08-46:0N TEMP 087-52:0W REL</th> <th>8.000 6.000 0.000</th> <th>DRY WET TUMID</th> <th>23.5</th> <th>WEATHER VISIBILITY CLOUD TYPE CLOUD AMT</th> <th></th> <th></th> <th>400</th> <th>SECCHI</th> <th>PER 10D : I ING 3200</th> <th>6 0</th> <th></th> <th></th>	19/02/68 8ARO 10:8 TEMP 08-46:0N TEMP 087-52:0W REL	8.000 6.000 0.000	DRY WET TUMID	23.5	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT			400	SECCHI	PER 10D : I ING 3200	6 0		
646 24.19 443 78.90 -2 101 1.12 13.52 13.94 0.11 832 25.54 104 375 22 1.96 17.42 23.41 0.18 873 25.54 104 470 5 2.41 21.92 29.07 0.18 871 26.16 44 11 429 14 2.22 20.95 29.07 0.18 891 26.16 44 45 10 2.22 20.91 20.05 0.08 912 26.26 34 47 47 2.22 20.71 20.92 0.08 912 43 47 47 2.22 20.71 20.92 0.08 913 27.62 43 7 2.26 22.76 0.03 808 26.32 40 2.26 2.27 20.01 0.03 808 26.41 5 47 47 2.26 2.27 0.02 <th>TEMP DEG.C</th> <th></th> <th>SAL 0/00</th> <th>SIGM</th> <th>02 UGAT/L</th> <th>02 UGAT/L</th> <th>AOU UGAT/L</th> <th>0/0 02 SATN</th> <th>P04 UGAT/L</th> <th>5104 UGAT/L</th> <th>NO3 UGAT/L</th> <th>NO2 UGAT/L</th> <th>Ĭ</th>	TEMP DEG.C		SAL 0/00	SIGM	02 UGAT/L	02 UGAT/L	AOU UGAT/L	0/0 02 SATN	P04 UGAT/L	5104 UGAT/L	NO3 UGAT/L	NO2 UGAT/L	Ĭ
4912 25.54 104 375 22 1.96 17.42 23.41 0.38 4712 25.96 25 470 5 2.41 21.92 29.07 0.18 9314 26.10 71 429 14 2.22 20.95 29.07 0.018 932 26.16 44 459 9 2.22 20.71 29.82 0.06 932 26.21 44 7 2.22 20.71 29.82 0.06 932 26.22 36.27 20.27 20.91 20.92 0.06 932 26.23 36 7 2.25 22.65 30.10 0.03 912 26.24 7 2.26 22.65 30.20 0.03 913 26.44 7 2.25 22.65 30.22 0.03 914 26.44 7 2.26 22.46 30.21 0.03 914 26.44 7 2.25 22	21.19		34.648	7	644	28.90	••	101	1.12	13,52	13,38	0.11	9.16
417 25.96 25 470 5 2.41 21.92 29.07 0.14 931 26.10 71 429 14 2.22 20.95 29.75 0.08 932 26.10 44 45 459 19 2.22 20.91 29.82 0.06 932 26.21 26.22 20.71 29.82 30.10 0.06 932 26.22 26.24 20.71 29.82 0.06 0.06 932 26.25 26.27 27.62 27.62 0.07 0.03 0.06 932 26.26 36 26.26 27.62 27.62 27.62 0.03 0.03 934 26.26 26.26 27.62 27.26 27.27 0.03 0.03 948 26.27 27.27 27.26 27.27 0.04 0.02 0.02 948 26.27 27.27 27.27 27.27 0.02 0.02 958 <t< td=""><td>16.43</td><td></td><td>34.832</td><td>•</td><td>104</td><td></td><td>375</td><td>22</td><td>1.96</td><td>17.42</td><td>23.41</td><td>0.38</td><td></td></t<>	16.43		34.832	•	104		375	22	1.96	17.42	23.41	0.38	
•918 26-10 71 429 14 212 20-95 29-75 20-86 9-86 •922 26-16 44 44 459 10 2-17 21-19 29-82 0-06 •922 26-26 52 453 10 2-17 21-19 29-82 0-06 •915 26-26 34 474 7 2-26 22-65 30-10 0-06 •916 26-28 43 474 7 2-26 22-66 30-10 0-09 •917 26-28 43 7 2-26 22-78 30-12 0-09 •918 26-29 47 7 2-26 22-78 30-22 0-09 •918 26-29 47 7 2-26 22-86 0-09 0-09 •917 26-39 47 47 8 2-26 22-86 0-09 0-09 •917 26-43 26-43 31-22 20-43 31-2	14.68		4.87	•	25		470	•	2.41	21.92	29.07	0.14	
9922 26-16 44 459 99 2-22 20-11 29-82 0.06 9922 26-20 52 453 10 2-17 21-19 29-19 0.06 9915 26-25 34 474 7 2-26 22-65 30-10 0.03 9912 26-26 43 474 7 2-26 22-65 30-10 0.03 9913 26-28 43 474 7 2-26 22-76 30-10 0.03 9914 26-28 476 475 7 2-26 22-76 30-12 0.03 982 26-36 26-36 476 476 3 2-43 29-63 0.03 9817 26-36 26-36 30-22 30-22 30-22 0.03 917 26-50 40 29-18 30-24 31-23 0.03 918 26-50 26-50 30-24 32-49 30-25 0.03	14.19		34.918	•	11		459	7.	2.22	20.95	29.75	0.08	7.89
-922 26-20 52 453 10 2-17 2-16 29-19 0-06 -915 26-25 34 474 7 2-26 22-65 30-10 0-03 -912 26-28 43 474 7 2-26 22-65 30-10 0-03 -899 26-28 40 28-86 474 7 2-29 22-69 0-02 0-03 -899 26-35 40 28-86 474 7 2-29 22-69 0-03 0-03 -899 26-35 40 28-86 474 8 2-39 23-69 0-03 -899 26-35 40 28-86 474 8 2-39 23-69 0-03 -917 46-36 50 47 40 2-45 26-43 31-23 0-03 -918 26-50 7 14 2-45 26-43 31-23 0-03 -918 26-51 14 2-45	13.95		•	26.	1		459	٥	2.22	20.71	29.82	90.0	
•915 26.25 34 474 7 2.26 22.65 30.10 0.03 •912 26.28 43 467 467 7 2.26 22.78 30.12 0.03 •899 26.32 33 27.62 473 7 2.29 23.48 30.22 0.03 •899 26.32 36 27.62 474 7 2.29 23.49 0.027 0.03 •899 26.43 26.43 36.45 6.24 36.25 0.03 0.03 •817 26.43 26.43 23.64 0.03 0.03 0.03 •718 26.50 3 2.45 26.43 31.62 0.03 •716 26.50 3 2.45 26.43 31.62 0.03 •716 26.50 3 2.45 2.43 31.62 0.03 •716 26.50 3 2.45 32.03 32.46 0.03 •716 26.51	13.76		34.922	•	52		453	10	2.17	21.19	29.19	90•0	7.90
-912 26.28 43 467 6 2.26 22.76 30.22 0.03 -899 26.32 38 27.62 473 7 2.29 23.67 29.69 0.006 -888 26.32 40 28.86 474 8 2.33 23.63 30.22 0.006 -859 26.41 15.34 504 3 2.45 26.43 30.22 0.03 -817 26.50 1 19.21 504 3 2.45 26.43 0.03 -778 26.50 1 19.21 507 4 2 2.45 32.03 32.66 0.00 -736 26.50 1 19.21 51 2 2.71 35.32 0.02 -736 26.70 1 10.06 551 0 2 20.71 35.32 0.01 -693 26.64 3 2.04 3.24 35.34 0 0 0	13.46		34.915	•	34		474	7	2.26	22.65	30.10	0.03	7.87
499 26-32 38 27-62 473 7 2-29 23-63 29-69 0-06 488 26-35 40 28-86 474 8 2-33 23-63 30-22 0-03 485 26-41 15-34 504 3 2-45 26-43 31-23 0-03 417 26-50 19-21 507 4 2-45 26-43 31-23 0-03 417 26-50 13-73 519 3 2-45 32-03 31-23 0-03 478 26-50 13-73 519 2 2-71 35-32 0-02 459 26-79 41-78 26-26 0-02 0-02 0-01 0-02 459 26-79 41-78 35-32 0-02 0-01 0-01 0-01 0-01 0-01 0-01 0-01 0-01 0-01 0-01 0-01 0-01 0-01 0-01 0-01 0-01 0-01 0-01 0-01<	13.29		34.912	•	4		194	•	2.26	22.78	30.22	0.03	7.88
988 26.35 40 28.86 474 8 2.33 23.63 30.22 0.03 659 26.41 15.34 504 3 2.45 26.43 31.23 0.03 736 26.50 19.21 507 4 2.45 26.43 31.23 0.03 736 26.50 13.73 519 3 2.45 32.06 0.02 0.02 736 26.70 13.67 51 0 2.91 32.46 0.02 0.02 659 26.79 41.78 32.46 0.02 0 2.90 41.78 28.56 0.01 653 26.70 2.91 41.78 35.32 0.02 0.01 653 27.02 4.04 3.27 41.78 35.34 0.01 658 27.27 3.34 64.43 3.34 0.02 0.00 573 27.27 33 27.65 54.4.54 56.9 0.02 0.00 </td <td>13.08</td> <td></td> <td>4</td> <td>26.</td> <td>38</td> <td>27.62</td> <td>473</td> <td>7</td> <td>5.29</td> <td>23.87</td> <td>29.69</td> <td>90.0</td> <td>7.87</td>	13.08		4	26.	38	27.62	473	7	5.29	23.87	29.69	90.0	7.87
•859 26.41 15.34 504 3 2.45 26.43 31.23 0.03 •317 26.50 19.21 507 4 2.43 28.38 31.62 0.002 •778 26.50 13.73 519 3 2.54 32.03 32.46 0.002 •736 26.57 3.54 2 2.71 35.32 30.25 0.002 •698 26.79 1.06 551 0 2.90 41.78 28.56 0.01 •698 26.79 41.78 26.35 0.01 0.01 0.01 •698 27.02 41.78 26.35 0.01 0.01 •608 27.02 41.78 26.39 0.01 0.01 •608 27.02 41.01 40.49 0.01 0.01 0.01 •608 27.02 20.27 20.44 0.01 0.01 0.01 0.01 0.01 •608 27.02 27.02 27.02	12.88		34.888	•	04	28.86	474	60	2.33	23.63	30.22	0.03	
917 26.50 19.21 507 4 2.43 28.38 31.62 0.02 778 26.57 26.57 32.03 32.46 0.02 736 26.57 32.03 32.46 0.02 698 26.79 41.78 28.56 0.00 699 26.79 41.78 28.56 0.00 699 26.79 41.78 28.56 0.00 699 26.79 41.78 28.56 0.01 699 26.79 41.78 28.56 0.01 699 27.02 41.78 28.36 0.01 600 27.15 10.15 11.15 27.01 27.01 0.00 659 27.22 27.02 27.01 40.04 40.04 0.00 6573 27.02 27.02 27.02 27.02 0.00 0.00 659 27.02 27.02 27.02 27.02 0.00 0.00 657 27.02 <td>12044</td> <td></td> <td></td> <td>•</td> <td></td> <td>15.34</td> <td>204</td> <td>3</td> <td>5.45</td> <td>26.43</td> <td>31.23</td> <td>0.03</td> <td>7.84</td>	12044			•		15.34	204	3	5.45	26.43	31.23	0.03	7.84
778 26.65 13.73 519 3 2.64 32.04 32.46 0.02 736 26.70 9.18 534 2 2.71 35.32 30.25 0.00 698 26.79 41.78 28.56 0.00 0.01 0.00 693 26.79 41.78 28.56 0.01 0.01 0.01 693 27.02 4.84 570 1 3.17 56.34 0.01 508 27.02 4.88 570 2 3.24 64.43 0.01 585 27.02 22.03 577 4 3.24 64.43 0.00 585 27.02 33 21.63 576 5 3.34 60.14 42.65 0.00 573 27.02 59 44.54 569 3.42 100.61 42.85 0.00 573 27.01 91 27.02 10.00 42.27 0.00	11.80		•	26.		19.21	507	4	2.43	28.38	31.62	0.02	
-736 26-70 9-18 534 2 2-71 35-32 30-25 0-00 698 26-79 41-78 28-56 0-01 653 26-39 41-78 28-56 0-01 653 27-02 4-84 570 1 3-17 56-39 35-30 0-01 658 27-02 4-84 570 2 3-24 64-43 35-30 0-01 585 27-22 22-35 575 4 3-24 11-01 40-76 0-00 573 27-27 33 21-63 576 5 3-34 60-14 42-65 0-00 573 27-62 59 44-54 568 3-42 100-61 42-85 0-00 593 27-51 91 5-53 110-59 42-27 0-00	11.20		34.778	•		13.73	519	3	2.54	32.03	32.46	0.02	7.81
698 26-79 1-06 551 0 2-90 41-78 28-56 0-01 693 27-02 4-084 570 1 3-17 56-39 36-34 0-01 508 27-02 4-084 570 2 3-24 64-43 39-20 0-01 585 27-02 22-35 577 4 3-24 71-01 40-76 0-00 573 27-27 33 21-63 576 5 3-24 100-14 42-65 0-00 573 27-42 59 44-54 568 9 3-42 100-61 42-65 0-00 593 27-61 91 5-45 100-61 42-85 0-00	10.40		34.736	•		9.18	534	7	2.71	35.32	30.25	00.0	
633 27.02 4.84 570 1 3.17 56.39 36.34 0.01 608 27.02 4.84 570 1 3.17 56.39 36.34 0.01 658 27.15 9.82 580 2 3.24 64.43 39.20 0.00 658 27.27 33 21.63 576 5 3.34 60.14 42.65 0.00 657 27.42 59 44.54 569 3.42 100.61 42.85 0.00 659 27.51 91 42.85 0.00 0.00 659 27.51 14 3.32 110.59 42.85 0.00	69.6		34.698	•		1.06	155	0	2 • 90	41.78	28.56	0.01	
•633 27.02 4.84 570 1 3.17 56.39 36.34 0.01 •608 27.15 1.15 35.90 0.03 •585 27.22 22.35 577 4 3.24 71.01 40.76 0.00 •573 27.27 33 21.63 576 5 3.34 80.14 42.65 0.00 •579 27.42 59 44.54 569 9 3.42 100.61 42.85 0.00 •593 27.51 91 545 14 3.32 110.59 42.27 0.00						0.25					31.32	0.15	
5608 27.015 9.82 580 2 3.24 64.43 39.20 0.003 585 27.022 22.35 577 4 3.24 71.01 40.76 0.00 6573 27.27 33 21.63 576 5 3.34 80.14 42.65 0.00 6579 27.42 56 9 3.42 100.61 42.85 0.01 6593 27.51 91 545 14 3.32 110.59 42.27 0.00	7.89		4.63	•		78.7	570	-	3.17	56.39	36.34	10.0	7.73
•608 27-15 9-82 580 2 3-24 64-43 39-20 0.000 •585 27-22 22-35 577 4 3-24 71-01 40-76 0.00 •573 27-27 33 21-63 576 5 3-34 80-14 42-65 0.00 •579 27-64 59 44-54 569 9 3-42 100-61 42-85 0.01 •593 27-51 91 545 14 3-32 110-59 42-87 0.00						1.15					35.90	0.03	
•585 27.22 22.35 577 4 3.24 71.61 40.76 0.00 •573 27.27 33 21.63 576 5 3.34 80.14 42.65 0.00 •579 27.42 59 44.54 569 9 3.42 100.61 42.85 0.01 •593 27.51 91 545 14 3.32 110.59 42.27 0.00	6.98		34.608	•		9.82	580	2	3.24	64.43	39.20	00.0	
.573 27.62 33.34 £0.14 42.65 0.00 .579 27.42 58 9 3.42 100.61 42.85 0.01 .593 27.51 91 545 14 3.32 110.59 42.27 0.00	6.22		4.58			22.35	577	4	3.24	71.61	40.76	0000	
6579 27642 59 44.54 569 9 3.42 100.61 42.85 0.01 6593 27.651 91 545 14 3.32 110.59 42.27 0.00	5.59		4.57	•		21.63	576	ď	3.34	80.14	42.65	00.00	
27.51 91 545 14 3.32 110.59 42.27	6707		.57	•	5.8	44.54	569	6	3.42	100.61	42.85	10.0	7.72
	3.80		34.593	•	91		545	7.	3.32	110.59	42.27	00.0	

		T G TH0	MPSCN CF	T G THOMPSON CRUISE 126	STATIO" 061	OBSERVED VA
CAST	DEPTH	NH3 UCAT/L	ALK MFG/L	7/10 %		
p=4	0	1.66		2.14		
-	10	0.48				
-	23	76.0				
-	(,	0.85	2.44	2.27		
	ç	0.58				
-	20		2.43	2.29		
	75	0.13	2.44	2.29		
-	100	20.02	2.43	2.29		
	125	91.0	2.44	2.30		
~	150	20.02				
~	162	0.19	2.44	2.29		
~	251	0.41				
~	102	0.20	2.44	2.31		
2	352	9.43)		
7	70%	0.45				
7	757	60.0				
2	505	06°C	2.46	2.37		
~	583	0.35				
~	603	0.41				
~	704					
7	408					
~	1003		2.49	2.40		
2	1264	9740				

		T G THO	MPSON CR	T & THOMPSON CRUISE 026	STAT10N 062	OBSERVED VALUES
CAST	CFPTH	NH3 UGAT/L	ALK MEG/L	C02		
-	0		2.42	2.11		
-	10					
1	20					
~	30		2.44	2.27		
	04					
7	50		2.43	2.29		
1	76		2.43	2.27		
~ 4	101		2.43	2.30		
~	126		2.44	2.31		
-	151					
2	200		2.43	2.31		
2	251					
8	300		2.43	2.33		
2	351					
2	401					
7	451					
2	501		2.45	2.37		
2	550					
8	599					
8	705					
8	808					
7	1005		5.49	2 • 4 2		
^	1204					

		Ŧ	8.14			7.86		7.85	7.91	7.88	7.88		7.84		7.80				7.72					7.7	
		NO2 UGAT/L	0.21	0.13	0.84	0.21	1.36	92.0	40.0	0.03	0.02	20.0	C•03	0.02	0.02	0.01	70.0	1.01	0.62	0.03	0.01	50.0	0.01	0.0	0.00
		N03 UGAT/L	13.36	12.78	20.43	29.08	28.40	30.29	28.70	30.18	31.50	31.29	31.49	32.67	32.55	33.19	30.65	28.71	32.16	35.69	45.09	41.71	43.31	43.06	42.73
	ER 100 15	\$104 UGAT/L	11.33	66.6	13.89	19.73	21.80	22.41	21,31	22.17	23.63	23.63	55.46	27.77	30.21	33.25	39.34		55.18		62.24	71.13	79.80	93.54	166.94
	WAVE PERIOD SECCHI SOU! DING	P04 UGAT/L	1.17	1.21	7.094	5.29	2.38	2 • 38	2.20	2.29	2.31	2.47	2.39	2.48	2.55	2.68	2.85		3.19		3.25	3.35	3.39	3.44	3.30
VALUES	RECC 004 RECC 004 16HT 01	0/0 02 SATN	116	102	7.1	2.1	σ	S	\$	10	α.	o	3	~	~		0		د،		0	~	s,	17	13
OB SE R VED	EXENTAND VERY POINT PRINTS PRI	ACU UGAT/L	-68	9	131	385	450	477	087	455	613	468	501	513	510	535	575		571		5,65	591	5 4 1	585	583
690	× × ∞•••••	02 UGAT/L								29.07	28.47	22.95	16.83	9.26	8.16	6.25	2.59	2.25	6.89	3.74	2.4.2	6.22	14.66	39.10	
STATION	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	92 UGAT/L	664	077	324	100	9	25	27	53	39	57											8.2	16	3
CRUISE 026	~~~~ ••• ••• •••	SIGMAT	23.55	23.89	24.66	25.70	25.98	26.10	26.22	26.27	26.32	26.35	26.39	26.46	26+35	59.92	26.75		76.98		27.12	27.72	27.29	27.41	27.51
THOMPSON CR	BARO 1000 TEMP DRY 7 TEMP WET 2 REL HUMID	SAL 0/00	34.626	34.612	34.594	34.847	34.875	34.878	34.908	34.911	34.898	34.889	34.964	34.933	34.797	34.769	34.714		34.628		34.593	34.573	34.569	34.567	34.590
1 G THO		TEMP DEG.C	23.41	22.19	19.27	15.76	14.60	14.05	13.57	13.37	13.08	:5.90	12.57	12.11	12.54	10.79	10.00		8.14		7.2	6.12	5.54	67.7	3.75
	19/02/68 21.1 09-00.0N 088-24.2W	ОЕРТН	c	01	20	30	C4	50	76	101	126	150	200	250	300	351	137	4.5.1	500	555	607	- C-	909	292	1001
	1040 1040 1040 1040 1040 1040 1040 1040	CAST	-	-	-1	-	7	-4	-		-4	~	7	2	۸.	~	7	~	2	2	~	7	2	^	^

														-44											
		ď	8.20			7.96		7.88	7.89	7.92	7.88		7.88		7.79				7.74					7.74	
		NO2 UGAT/L	0.25	0.25	0.34	0.26	0.32	0.05	0.02	0.02	0.01	*0•0	0.05	0.02	0.01	0.01	0.01	0.14	0.01	0.02	00.0	0.01	0.01	10.0	0.01
		NO3 UGAT/L	10.34	11.43	17.06	25.84	30.15	30.92	30.57	30.28	30.87	30.97	31.68	32.67	33.52	33.94	32.26	32.26	35.08	37.50	39.20	41.93	42.17	43.40	42.98
	MAVE PERTOD 16 SECCHI SOUNDING 3200	\$104 UGAT/L	2.68	3.04	9.50	19.49	20.95	21.07	22.17	22.29	23.02	22.78	24.60	26.92	30.33	32.76	38.85		53.23		26.39	90.69	17.71	92.20	104.14
	MAVE P SECCHI SOUNDI	P04 UGAT/L	96.0	1.10	1.56	1.98	2.19	2.21	2.24	2.20	2.28	2.23	2.32	66.7	2.55	2.60	2.84		3.11		3.23	3.30	3.32	3.37	3.26
VALUES	VELCO DIREC DIREC DIREC DIREC O33	0/0 02 SATN	111	105	۲,	4	2	9	13	7	7	9	9	4	2	2	O		a		ပ	2	6	œ	14
OBSERVED VALUES	E STAND OFFE	AOU UGAT/L	94-	-23	797	473	491	067	441	472	411	787	884	505	523	527	547		570		585	290	234	576	545
M 062		02 UGAT/L								43.09#	26.52	30.39	59.66	21.89	9.73	12.66*	1.19	0.34	80°	1.32	2.29	9.39	19.76	48.83	
STATION	WEATHER VISIBILIT CLOUD TYP CLOUD AMT	02 UGAT/L	472	797	183	2.1	01	7.1	99	36	34	31											16	50	92
CRU15E 026	40.00 40.00	SIGMAT	23.53	24.02	24.38	25.97	26.11	56.19	26.24	26.28	26.30	26.33	26.40	26.48	26.58	26.66	25.76		56.99		27.11	27.22	27.30	27.43	27.51
THOMPSON CR	MARO 1011 TEMP DRY 2 TEMP MET 2	SAL 0/00	34.560	34.510	34.589	34.922	34.930	34.942	34.922	34.928	34.907	34.889	34.881	34.828	34.783	34.747	34.712		34.650		34.598	34.579	34.571	34.591	34.594
T G THG		TEMP DEG.C	23.30	21.45	20.33	14.84	14.21	13.86	13.57	13•39	13.17	12.98	12.58	11.97	11.27	10.64	76.6		8.21		7.06	6.18	5.48	4.45	3.76
	19/02/68 08-34-08 08-36-08	DEPTH	0	10	70	30	04	20	76	101	126	151	200	251	300	351	107	451	106	550	565	705	808	1005	1204
	4540 240 240 240 240 240 240 240 240 240 2	CAST	-	-	-	-	-	-	-	-	~		7	7	7	7	2	~	2	7	~	~	~	2	2

		T 6 THO	TIG THOMPSON CRUIST SZK	015F 52K	STATION 063	CHSER
CAST	EP7.	1,43 UCAT/L	ALY MFG/L	C02		
-1	r	90.0	2.41	2.10		
-4	ទ្ព	1.59				
-1	2	1.79				
* *1	30	38.0	2.41	7.57		
-	C 3	2.54				
••	9.0	7.50	7.43	2.30		
**	76	0.38	2.42	2.30		
-	101	0.41	2.41	7.30		
-	126	0.04	2.40	2.28		
1	150	09•0				
2	200	0.78	2.42	2.27		
2	250	0.81				
2	300	0.62	2.42	2.31		
2	351	0.37				
~	104	1.87				
7	451	7.91				
~	530	90.0	2.44	2.37		
^	550	0.08				
ĸ.	600	0.73				
~	730					
~	0Ca					
^	666		2.47	2002		
~	1200					

		Ţ	8.38			8.08		7.94	7.86	7.89	7.91		7.84		7.77				7.71					7.73	
		NO2 UGAT/L	0.10	0.19	0.68	1.75	1.23	06.0	0.01	0.03	60.0	70°0	0.02	0.02	0.02	0.79	1.45	0.83	0.58	0.03	0.01	0.01	0.01	0.01	00.0
		N03 UGAT/L	0.11	00.00	00.00	3.69	13.66	19.40	22.54	27.83	30.31	28.79	32.46	32.80	32.42	28.76	27.43	79.67	37.16	41.23	42.72	45.58	46.97	46.93	45.84
	ER 10D 2	S104 UGAT/L	0.37	00.0	2.19	9.53	13.15	17.05	23.02	24.12	24.12	23.63	26.92	29.84	33.13	39.46	40.94		58.34		64.55	71.86	81.61	80.66	1111.33
	MAVE PERTOD SECCHI SOUNDING 3	PO4 UGAT/L	0.20	0.32	0.74	1.47	1.82	1.97	2.38	2.38	2.38	2.28	2.42	2.50	2.62	2.82	2.95		3.74#		3.27	3.33	3.39	3 • 3 5	3.30
VALUES	660 641 033	0/0 02 SATN	137	119	96	1.1	7.5	52	m	е.	6	7	-	-	0	0	0		0		0	-	2	6	14
OBSERVED VALUE	WENT OF CONTROL OF CON	AOU UGAT/L	-152	-78	19	124	267	356	064	495	964	478	515	521	534	545	555		575		587	593	581	695	548
N 064	>w ∞×o	02 UGAT/L								4.67	5.10	56.99	4.93	5.57	1.87	1.06	1.27	0.30	0.89	76.0	1.27	6.03	10.24	50.36	
STATION	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	22 UGAT/L	568	167	007	310	194	117	15	13	16	36											28	57	68
CRU1SE 026	667 3000 7044	SIGMAT	22.50	22.65	22.82	23.83	24.88	25.42	26.17	76.24	26.30	26.34	26.41	26.51	26.61	26.72	26.83		27.02		27.12	27.21	27.29	21.42	27.51
THOMPSON CR	BARO 101: TEMP DRY 2: TEMP WET 2: REL HUMID	8AL 0700	33.853	33.885	34.024	34.480	34.631	34.859	34.892	34.884	34.880	34.871	34.846	34.804	34.760	34.712	34.667		34.616		34.593	34.575	34.567	34.576	34.594
7 G 7HO		TEMP DEG.C	54.99	24.57	24.35	22.04	13.52	17.03	13.77	13.39	13.09	12.85	12.39	11.73	10.99	10.18	9.30		7.85		66.9	6.23	5.50	4.46	3.74
	20/02/68 3-8 09-30 N 098-25 W	DEPTH	0	10	20	53	39	64	74	66	123	149	198	675	298	347	397	677	867	543	598	669	199	966	1198
	LANG LONG LONG	CAST	-	-	-	-	-	-	-	~	-	7	7	2	2	~	~	7	~	~	7	~	~	7	2

		1 G THO	ND SCN CE	T G THOMPSON CRUISE 026	STATION 064	OPSERVED VALUES
CAST	DEPTH	NH3	ALK •= 6/1.	C02		
-	ç		2.39	1.99		
-	13					
-	20					
~	52		2.41	7.17		
-	33					
-	64		2.43	2.23		
	74		2.44	2.30		
-	66		2.44	2.31		
	173		2.44	2.34		
-	148					
~	198		2.44	2.35		
~	646					
7	¥62		2.44	2.34		
7	74.7					
7	166					
7	644					
2	£5 7		2.45	7.44		
2	648					
2	538					
~	669					
2	661					
2	966		7.51	2.41		
~	1195					

													-	120	-										
		£	8.19			7.90		7.88		7.87	7.83		7.75		7.74				7.72					7.67	
		N02 UGAT/L	0.30	0.23	0.54	0.28	0.39	0.19	60.0	90•0	90•0	80.0	2.07	0.05	0.02	0.02	0.03	1.10	60.0	0.02	C • C 3	00.0	0.01	10.0	90.0
		NO3 UGAT/L	8.19	10.78	17.74	25.27	26.21	28.51	29.66	29.90	30.53	30.76	30.48	31.68	33.30	32.88	30.10	29.08	34.03	36.03	37.79	41.73	43.40	43.31	42.23
	ER 10D 2	S104 UGAT/L	0.37	0.61	12.42	18.27	19.12	20.58		22.29	25.58	24.24	25.58	28.50	31.06	37.03	42.39		56.64		65.41	72.59	82.70	98.17	111.57
	WAVE PERIOD SECCHI SOUNDING 3	PO4 UGAT/L	0.76	0.91	1.55	1.94	1.92	2.08	2.15	2.14	2.21	2.25	2.31	2.40	2.45	2 • 71	3.06		3.27		3.22	3.31	3.36	3 • 35	3.26
VALUES	0 M M O O O O O O O O O O O O O O O O O	0/0 02 SATN	121	119	9	19	20	11	11	11	10	~	4	4	æ	7	0		0		O	7	m	σ.	15
OBSERVED VALUE	WAND VELOOPERAND V	ACU UGAT/L	-87	-79	179	366	398	6443	450	455	694	475	465	503	518	539	550		571		585	265	294	563	543
590 N	≻ ພ	02 UGAT/L								43.14	38.38	25.92	22.44	21.25	14.24	4.25	1.23	0.89	1.83	2.12	2.85	8.24	8.82	45.56	
STATION	VIENTHER CLOUD TYPE CLOUD AMT	02 UGAT/L	511	508	273	06	66	57	55	54	51	98											16	57	76
CRUISE 026	~~~~ ~~~~ ~~~~	SIGMAT	23.45	23.63	24.57	25.78	26.01	26.11	26.21	26.27	26.30	26.33	26.39	56.49	26.58	26.70	26.77		56.99		27.12	27.21	27.29	27.42	27.51
THOMPSON CR	BARO 1011 TEMP DRY 21 TEMP WET 2	SAL 0/00	34.544	34.554	34.619	34.901	34.918	34.918	34.922	34.916	34.902	34.894	34.869	34.826	34.783	34.734	34.696		34.628		34.590	34.572	34.565	34.569	34.590
T G THO	80++81	TEMP DEG.C	23.56	22.95	19.71	15.60	14.60	14.17	13.70	13.40	13.15	15.99	12.59	11.93	11.25	10.40	9.72		8.06		66.9	6.17	5.48	4.46	3.75
	20/62/68 10-5 08-54-0N	ОЕРТН	0	10	50	30	9	20	75	101	921	151	661	546	662	347	399	677	498	547	597	697	191	166	1200
	DATE HOUR LAT LONG	CAST			-	-	-	-	-	-		-	2	2	2	2	7	7	7	~	~	7	~	~	~

		T G THOWPSON	50 1:05 da	64U1SE 026	STATIC% DES	CRSEPIED IALUES
CAST	06974	WH3	ALK WEG/L	C02		
	O	0.83	2.44	2.08		
-1	51	1.49				
-	"	1.63				
	33	1.22	2.44	2.25		
	Ş	1.06				
-	5,7	0.57	3.45	2.28		
-	75	5.26	2.45	2.29		
-	101	0.28	2.45	2.31		
-	125	0.13	2.45	2.32		
-	151	09.0				
~	199	0.51	2.45	2.32		
~	549	0.21				
~	562	0.21	2.45	2.33		
~	347	0.51				
~	399	0.10				
~	644	90.0				
~	£6 7	06.90	2.48	2.33		
~	247	20.0				
2	597	3.45				
7	169					
~	191					
2	166		2.51	2.43		
~	1200					

													-	122	-										
		ğ	8.31			7.89		7.89	7.86		7.67		7.82		7.79				7.71					7.71	
		NO2 UGAT/L	0.18	0.15	0.12	0.23	1900	71.0	40.0	60.0	C.02	0.02	0.05	0.05	9000	60.0	90.0	1.15	0.93	0.14	*0*0	0.03	0.03	0.03	0.02
		NO3 UGAT/L	29.6	0.99	24.29	25.28	26.39	29.07	29.92	30.69	30.11	30.32	31.80	32.43	33.28	33.38	31.25	29.74	31.31	35.28	39.33	41.28	43.38	43.59	42.59
	ER 10D 2 13 NG 3336	S104 UGAT/L	0.61	1.22	16.56	18.27	19.00	20.71	21.31	22.41	22.53	23.02	26.19	28.01	31.55	34.96	41.17		62.61		61.87	69.91	77.83	93.54	104.63
	MAVE PERIOD SECCHI SOUNDING 3	P04 UGAT/L	0.39	67.0	2.03	1.92	1.97	2.11	2.18	2.26	2.18	2.21	2,33	2.38	2.50	79.2	2.82		3.14		3.18	3.28	3.36	3.34	3.33
VALUES	ELUC ELUC ELUC ELUC ELUC ELUC ELUC ELUC	2/0 0/C SATN	129	127	15	30	17	13	90	7	11	01	m	4	2	7	0		0		0	7	4	Q U	15
OBSERVED VALUE	MEND VEL MANE DIR MANE DIR I DIR	AOU UGAT/L	-122	-115	399	344	414	438	465	474	455	461	503	507	525	535	646		571		995	593	586	572	541
990 N	× Macou Macou	02 UGAT/L								18.87	43.52	41.86	15.85	19.69	06*6	5.31	1.15	1.27	0.38	1.70	1.15	95.9	15.51	45.54	
STATION	VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	245	940	69	148	69	63	1,	34	96	53											22	53	76
CRU1SE 026	7979 4979	SIGMAT	23.07	23.28	25.16	25.91	26.32	26.12	26.21	26.26	26.31	26.34	14.92	26.51	26.60	26.67	26.17		26.97		27.12	27.21	27.28	27.41	27.49
THOMPSON CR	BARO 1012 TEMP DRY 28 TEMP WET 25	SAL 0/00	34.328	34,323	34.733	34.904	34.912	34.909	34.921	34.913	34.902	34.889	34.861	34.810	34.772	34.744	34.698		34.627		34.594	34.571	34.565	34.569	34.584
1 G 7HC		TEMP DEG.C	24.29	23.55	17.70	15.02	14.54	14.06	13.69	13.40	13.15	12.93	12.48	11.77	11.09	10.59	9.18		8.20		7.01	6.22	5.59	4.53	3.91
	20/02/69 18-0 08-53-N 089-27-K	рертн	0	90	50	30	ş	Ş	92	101	126	150	197	548	297	346	395	445	767	5	593	269	262	766	1194
	LOADE RATE RATE RATE	CAST	~	~	-	~	-		~	-	-	~	7	7	7	2	2	~	~	8	7	~	7	7	7

		T G TH3	T G THOMPSON CPUISE 026	UISE 026	STATIO: 066	OBSERVED VALUES
CAST	DEPTH	NH3 UGAT7L	ALK MEG/L	C02		
-	0		2.43	2.00		
-	10					
-	20					
-	30		2.45	2.26		
-	9					
-	80		2.44	2.28		
-	76		2.44	2.26		
-	101		2.64	2.36		
-	126		2.45	2.29		
7	150					
7	197		2.45	2.30		
7	548					
7	162		2.46	2.33		
7	346					
7	395					
2	445					
7	764		2.47	2.38		
7	544					
~	593					
~	269					
7	792					
8	766		2.51	2.43		
•						

		T G THO	THOMPSON C	CRUISE 326	STATION	N 067	OBSERVED VALUES	VALUES					
4040 HQ-50 HQ-50	21/02/68 0.7 098-52.0N		BARO 10 TEMP DRY TEMP WET REL HUMID	0 20 26 0 0 1 8 8 8	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	∞×o^	WE NO VEL	RECC 333	MAVE PERIOD SECCHI SOUNDING 3	ERIOD X			
CAST	ОЕРТН	TEMP DEG.C	SAL 0/00	SIGMAT	02 UGAT/L	02 UGAT/L	AOU UGAT/L	0/0 02 SATN	PO4 UGAT/L	S104 UGAT/L	NO3 UGAT/L	NO2 UGAT/L	Ť.
-	o	25.10	34.358	22.85	296		-182	144	0.20	16.0	0.84	60.0	8.32
-	10	23.42	34,321	23,32	534		-108	126	0.54	1.22	3.26	0.10	
	20	21.73	34.415	23.87	383		54	88	1.26	10.96	12.58	C-15	
-	30	19.60	34.593	24.58	219		233	4	1.78	12,55	19.78	0.65	7.97
-4	04	15.61	34.895	25.77	116		371	54	2.00	17.42	25.01	6.12	
~	50	14.59	34.911	26.01	77		455	a c	2.18	22.53	29.04	98.0	7.83
-	74	13.92	34.913	26.15	4		697	6 0	2.23	22.17	30.54	0.05	7.80
-	66	13.60	34.914	26.22	36	56.99	471	7	2.27	22.29	30.83	0.01	7.88
-	124	13.28	34.893	26.27	38	21.55	472	~	2.32	23.26	31.72	0.01	7.76
-	149	12.95	34.885	26.33	32	20.70	485	9	2.36	24.12	32.17	0.02	
7	198	12.47	34.841	26•39		15.26	503	æ	2.38	25.58	31.66	0.07	7.85
7	247	11.82	34.814	26.50		66.5	520	-	2.59	29.11	33.34	0.02	
7	599	11.06	34.765	26.60		5.23	530	~	2.60	32.52	33.65	0.01	7.78
7	345	10.36	34.730	26.70		4.63	539	~	2.71	35.93	33.52	0.01	
~	396	9.84	34.705	26.77		2.68	247	0	2.87	39.95	33.44	0.01	
~	445					0.47					29.52	1.21	
~	495	8.20	34.626	26.97		0.98	570	0	3.19	53.71	33.24	0.51	7.72
~	545					0.68					35.35	0.29	
7	595	7.03	34.590	27.11		1.10	586	0	3.33	61.75	40.32	0.02	
~	669	6.38	34.573	27.19		5.82	591	~	3.33	67.84	42.27	00.0	
~	795	69.6	34.573	27.28	35	10.92	572	9	3.39	76.00	78.77	00.0	
~	766	4.67	34.570	27.39	09	40.80	295	01	3.48	89.52	44.16	00.0	7.74
7	1199	3.96	34.583	27.48	96		538	15	3.44	102.92	74.44	00.0	

		T G THO	T G THOMPSON CRUISE 026	101SE 026	STATION 067	ORSERVED VAL	Š
CAST	DEPTH	NH3 UGAT/L	ALK MEG/L	CO2 MMOL/L			
~	0		2.44	1.98			
7	01						
-	20						
-	30		2.43	2.21			
-	04						
~	20		2.44	2.28			
~	74		2.44	2.31			
-	66		2.45	2.29			
-	124			2.31			
-	149						
7	198		2.45	2.32			
~	247						
7	5		2.46	2.34			
8	345						
~	396						
~	445						
~	495		2.48	2.39			
~	545						
7	595						
~	669						
2	795						
8	166		2.50	2.43			
8	1199						

MANE HEIGHT 1 1 1 1 1 1 1 1 1	T G THOMP	T G THOMP	10MPS	~ ,	280	STATION	0		VALUES	A S	ERIOD 2			
ADUL 0/0 02 o2	3.0 TEMP DRY 26.4 VISIBI 50N TEMP WET 23.5 CLOUD 50W REL HUMID 78 CLOUD	TEMP DRY 26.4 VISIBI TEMP WET 23.5 CLOUD REL HUMID 78 CLOUD	EMP DRY 26.4 VISIBI EMP WET 23.5 CLOUD EL HUMID 78 CLOUD	23.5 CLOUD 78 CLOUD	VISIBILI CLOUD TY CLOUD AM		₩ • • • •	E A VERO DO IN THE IN T	REC 34 16HT 1	SOUND	NG 3292			
-55 114 0.27 1.34 0.20 -57 114 0.27 1.58 0.19 -22 106 0.40 1.71 0.46 36 87 1.05 4.38 9.43 364 24 2.06 16.08 22.97 494 3 2.38 22.95 30.87 495 4 2.07 17.17 22.02 499 2 2.38 22.40 30.87 499 2 2.38 24.07 31.86 499 3 2.39 24.07 31.86 504 3 2.40 25.70 31.86 504 3 2.40 25.70 31.86 542 0 2.64 25.70 31.86 542 0 2.65 30.33 31.57 542 0 2.65 30.33 31.57 553 0 3.08 45.95 25.95	DEPTH TEMP SAL SIGMAT 02 DEG.C 0/00 UGAT/L	SAL SIGMAT	SIGMAT	SIGMAT	02 UGAT/L		02 UGAT/L	AOU UGAT/L	0/0 02 SATN	PO4 UGAT/L	\$104 UGAT/L	NO3 UGAT/L	NG2 UGAT/L	ď
-57 114 0.27 1.58 0.19 -22 106 0.40 1.71 0.46 56 87 1.05 4.98 9.43 361 22 2.06 16.08 22.97 364 24 2.07 17.17 22.02 494 3 2.38 23.26 30.87 495 4 2.39 24.73 30.85 495 4 2.39 24.97 31.86 495 4 2.39 24.97 31.86 496 3 2.40 25.70 31.86 504 3 2.40 27.53 31.56 542 0 2.54 30.33 31.56 542 0 2.65 33.37 31.56 542 0 2.65 33.37 31.56 553 0 3.08 45.95 27.19 573 0 3.30 66.50 37.14 592 1 3.34 73.69 40.19 574 8	0 25.93 33.876 22.23 465	3 33.876 22.23	3.876 22.23	2.23	465			-55	114	0.27	1.34	0.20	0.05	8.33
5.6 87 1.05 4,38 9,43 5.6 87 1.05 4,38 9,43 36.1 22 2.06 16,08 22.97 36.4 24 2.06 16,08 22.97 494 3 2.38 23.26 30.87 6.84 499 2 2.39 24.73 30.95 10.96 492 5 2.40 25.70 31.86 10.96 492 5 2.40 25.70 31.86 10.96 492 5 2.40 25.70 31.86 10.96 492 5 2.40 25.70 31.86 10.96 492 5 2.40 25.70 31.86 10.71 504 3 2.40 25.70 31.86 10.83 534 0 2.65 33.37 31.54 10.83 553 0 2.65 37.19 10.78 583 0 3.30 66.50 37.11 10.78 592 1 3.46	10 25.80 33.868 22.26 468	33.868 22.26	3.868 22.26		468			-57	114	0.27	1.58	0.19	0.02	
5.0 87 1.005 4.38 9.43 361 22 2.06 16.08 22.97 364 24 2.07 17.17 22.02 494 3 2.38 23.26 30.87 6.84 499 2 2.39 24.73 30.95 10.96 492 2 2.39 24.73 30.95 10.96 492 5 2.40 25.70 31.86 10.96 492 5 2.40 25.70 31.86 10.96 492 5 2.40 25.70 31.86 10.97 504 3 2.40 25.70 31.86 10.71 504 3 2.40 27.53 31.57 10.72 542 0 2.65 33.37 31.57 10.83 5 0 3.08 45.92 27.19 10.83 0 3.20 58.89 29.91 10.74 3.34 73.69 40.19 13.73 584 4 3.46 40.50 <td>20 25.30 33.846 22.40 437</td> <td>5.30 33.846 22.40</td> <td>3.846 22.40</td> <td>04.</td> <td>437</td> <td>_</td> <td></td> <td>-22</td> <td>106</td> <td>0.40</td> <td>1.71</td> <td>94.0</td> <td>0.21</td> <td></td>	20 25.30 33.846 22.40 437	5.30 33.846 22.40	3.846 22.40	04.	437	_		-22	106	0.40	1.71	94.0	0.21	
361 22 2.06 16.08 22.97 364 24 2.07 17.17 22.02 494 3 2.38 23.26 30.87 6.84 495 4 2.39 24.73 30.95 10.96 492 5 2.39 24.97 31.88 10.96 492 5 2.40 25.70 31.86 17.17 504 3 2.40 27.53 31.86 17.17 504 3 2.40 27.53 31.86 10.23 524 1 2.54 30.33 31.56 10.24 524 0 2.65 33.37 31.56 10.19 553 0 2.65 33.37 31.56 10.27 573 0 3.20 58.95 29.41 10.34 587 0 3.30 66.50 37.14 8.07 592 1 3.34 73.69 40.19 13.73 584 4 3.46 95.86 40.20 24.86 <td>30 24.23 34.286 23.06 363</td> <td>4.23 34.286 23.06</td> <td>4.286 23.06</td> <td></td> <td>36</td> <td>_</td> <td></td> <td>96</td> <td>87</td> <td>1.05</td> <td>4.38</td> <td>9.43</td> <td>1.38</td> <td>6.17</td>	30 24.23 34.286 23.06 363	4.23 34.286 23.06	4.286 23.06		36	_		96	87	1.05	4.38	9.43	1.38	6.17
5.31 24 2.07 17.17 22.02 494 3 2.38 23.26 30.87 6.84 495 4 2.39 24.73 30.95 10.96 492 5 2.39 24.97 31.88 10.96 492 5 2.40 25.70 31.86 17.17 504 3 2.40 27.53 31.57 3.44 524 1 2.55 30.33 31.57 0.76 542 0 2.65 33.37 31.56 1.123 534 0 2.65 33.37 31.58 1.23 542 0 2.65 33.37 31.58 1.183 553 0 3.08 45.92 27.19 1.24 573 0 3.20 58.95 29.41 1.27 573 0 3.30 40.65 37.14 8.07 584 4 3.46 40.10 41.24 8.07 574 8 3.48 41.26 95.04	40 18.11 34.704 25.04 103	8.11 34.704 25.04	4.704 25.04		103			361	22	2.06	16.08	22.97	0.79	
5.31 494 3 2.38 23.26 30.87 6.84 499 2 2.39 24.73 30.95 10.96 492 2 2.39 24.97 31.88 10.96 492 5 2.40 25.70 31.86 17.17 504 3 2.40 27.53 31.86 3.44 524 1 2.54 30.33 31.57 0.76 542 0 2.65 33.37 31.58 1.19 553 0 2.79 38.85 29.56 1.083 3 3.08 45.92 27.19 1.083 3 3.20 58.95 29.91 1.078 583 0 3.20 58.95 29.91 1.078 584 4 3.36 40.19 41.24 24.86 574 8 3.48 95.86 41.24 24.86 574 8 3.48 95.86 41.24 255 11 3.39 111.57 42.99	50 16.72 34.700 25.37 113	6.72 34.700 25.37	4.700 25.37		113			364	54	2.07	17.17	22.02	0.76	7.95
5.31 499 2 2.39 24.73 30.95 6.84 495 4 2.39 24.97 31.88 10.96 492 5 2.40 25.70 31.86 17.17 504 3 2.40 27.53 31.86 3.44 524 1 2.54 30.33 31.58 1.23 534 0 2.65 33.37 31.58 1.03 542 0 2.79 38.85 29.56 1.04 553 0 3.08 45.92 27.19 1.083 1.07 3.20 58.95 29.91 0.34 573 0 3.20 58.95 29.91 1.078 587 0 3.30 66.50 37.14 8.07 592 1 3.34 73.69 41.24 24.86 574 8 3.48 4.3.69 41.24 24.86 574 8 3.48 42.99	75 13.53 34.880 26.21 13	3.53 34.880 26.21	4.880 26.21		13			767	e	2.38	23.26	30.87	90.0	7.67
495 4 2.39 24.97 31.88 492 5 2.40 25.70 31.86 504 3 2.40 27.53 31.57 524 1 2.54 30.33 31.58 534 0 2.65 33.37 31.58 542 0 2.79 38.85 29.56 553 0 3.08 45.92 27.19 573 0 3.20 58.95 29.91 592 1 3.30 66.50 37.14 592 1 3.34 73.69 40.19 544 4 3.45 80.63 41.24 574 8 3.48 95.86 43.07	100 13.21 34.580 26.28 11	3.21 34.580 26.28	4.580 26.28		11		5.31	664	7	2.39	24.73	30.95	0.02	7.88
492 5 2.40 25.70 31.86 504 3 2.40 27.53 31.57 524 1 2.54 30.33 31.57 534 0 2.65 33.37 31.57 542 0 2.79 38.85 29.56 553 0 3.08 45.92 27.19 573 0 3.20 58.95 29.91 587 0 3.30 66.50 37.14 592 1 3.34 73.69 40.19 584 4 3.45 80.63 41.24 574 8 3.48 95.86 43.07 565 11 3.39 111.57 42.99	125 12.96 34.874 26.32 19	2.96 34.874 26.32	4.874 26.32		19		6.84	465	4	2.39	24.97	31.88	0.01	7.86
504 3 2.40 27.53 31.58 524 1 2.54 30.33 31.58 534 0 2.65 33.37 31.58 542 0 2.79 38.85 29.56 553 0 3.08 45.92 27.19 573 0 3.20 58.95 29.91 587 0 3.30 66.50 37.14 592 1 3.34 73.69 40.19 544 4 3.45 80.63 41.24 574 8 3.48 95.86 43.07 565 11 3.39 111.57 42.99	150 12.69 34.865 26.37 25	34.865 26.37	4.865 26.37	26.37	25		10.96	492	S.	2.40	25.70	31.86	60.0	
524 1 2.54 30.33 31.58 534 0 2.65 33.37 31.57 542 0 2.79 38.85 29.56 553 0 3.08 45.92 27.19 573 0 3.20 58.95 29.91 587 0 3.30 66.50 37.14 592 1 3.34 73.69 40.19 544 4 3.45 80.63 41.24 574 8 3.48 95.86 43.07 565 11 3.39 111.57 42.99	197 12.21 34.826 26.43	•21 34•826 2	4.826 2	26.43			17.17	204	m	2.40	27.53	31.57	10.0	7.86
534 0 2.65 33.37 31.57 542 0 2.79 38.85 29.56 553 0 3.08 45.92 27.19 26.80 26.80 26.80 26.80 573 0 3.20 58.95 29.91 587 0 3.30 66.50 37.14 592 1 3.34 73.69 40.19 544 4 3.45 80.63 41.24 574 8 3.48 95.86 43.07 565 11 3.39 111.57 42.99	248 11.69 34.795 26.51	•69 34•795	4.795	26.51			3.44	254	-	2.54	30.33	31.58	0.02	
542 0 2.79 38.85 29.56 553 0 3.08 45.92 27.19 573 0 3.20 58.95 29.91 587 0 3.30 66.50 37.14 592 1 3.34 73.69 40.19 584 4 3.45 80.63 41.24 574 8 3.48 95.86 43.07 565 11 3.39 111.57 42.99	298 11.05 34.760 26.60	•05 34•760	4.760	26.60			1.23	534	0	2.65	33.37	31.57	0.03	
553 0 3.08 45.92 27.19 573 0 3.20 58.95 29.91 587 0 3.30 66.50 37.14 592 1 3.34 73.69 40.19 584 4 3.45 80.63 41.24 574 8 3.48 95.86 43.07 565 11 3.39 111.57 42.99	347 10.37 34.725 26.69	0.37 34.725 26	4.725 26	26.69			92.0	245	0	2.79	38.85	29.56	0.15	
573 0 3.20 58.95 29.91 33.75 587 0 3.30 66.50 37.14 592 1 3.34 73.69 40.19 584 4 3.45 80.63 41.24 574 8 3.48 95.86 43.07 565 11 3.39 111.57 42.99	398 9.49 34.677 26.81	•49 34•677 26	4.677 26	56			1.19	553	•	3.08	45.92	27.19	1.06	
573 0 3.20 58.95 29.91 587 0 3.30 66.50 37.14 592 1 3.34 73.69 40.19 584 4 3.45 80.63 41.24 574 8 3.48 95.86 43.07 565 11 3.39 111.57 42.99	447						1.83					26.80	1.49	
587 0 3.30 66.50 37.14 592 1 3.34 73.69 40.19 584 4 3.45 80.63 41.24 574 8 3.48 95.86 43.07 565 11 3.39 111.57 42.99	497 7.99 34.611 26.99	•99 34•611 26	4.611 26	26.99			1.27	573	0	3.20	58.95	29.91	1.24	7.74
587 0 3.30 66.50 37.14 592 1 3.34 73.69 40.19 584 4 3.45 80.63 41.24 574 8 3.48 95.86 43.07 565 11 3.39 111.57 42.99	547						0.34					33.75	0.29	
592 1 3.34 73.69 40.19 584 4 3.45 80.63 41.24 574 8 3.48 95.86 43.07 565 11 3.39 111.57 42.99	596 6.91 34.590 27.13	.91 34.590	065.4	27.13			1.78	587	0	3.30	99.30	37.14	0.01	
584 4 3.45 80.63 41.24 574 8 3.48 95.86 43.07 565 11 3.39 111.57 42.99	696 6.16 34.573 27.22	.16 34.573 2	4.573 2	27.22			8.07	592	-	3.34	73.69	40.19	0.02	
574 8 3.48 95.86 43.07 565 11 3.39 111.57 42.99	797 5.57 34.567 27.29 25	•57 34•567 27•29 2	4.567 27.29 2	7	25		13.73	584	4	3.45	80.63	41.24	0.02	
11 3.39 111.57 42.99	996 4.66 34.564 27.39 48	•66 34•564 27•39	4.564 27.39	•39	4		24.86	574	6 0	3.48	95.86	43.07	00°0	7.76
	1197 3.83 34.589 27.50 70	.83 34.589 27.50	4.589 27.50	•50	70			595	=======================================	3.39	111.57	45.99	00.0	

		T G THOMPSON		CRUISE 026	STATION 069	OBSERVED VALUES
CAST	DEPTH	NH3 UGAT/L		CO2 MMOL/L		
-	0			1.98		
-	01					
-	20					
-	30		2.43	2.07		
-	04					
~	20		2.45	2.23		
-	75		2.44	2.27		
7	100		2.46	2.28		
-	125		2.44	2.27		
~	150					
8	197		2.46	2.30		
8	248					
8	298			2.31		
~	347					
8	398					
8	447					
8	497		2.48	2.36		
7	547					
8	969					
8	969					
7	191					٠
8	966		2.52	2.40		
~	1197					

		9	T G THOMPSON CRUI	CRUISE 026	STATION 070	070	OBSERVED VALUES	VALUES					
25.25 F. 25.25 S. 25.25	22/02/68 16-59-08 087-24-08		BARO 1011- TEMP DRY 24- TEMP WET 24-	0 22 22 4 4 6 6 7 6 7	VISIBILITY CLOUD TYPE CLOUD AMT	× × ×	EEEE FEEE	0000 10000 10000	SECON	WAVE PERIOD 39 SECCHI SOUNDING 4590			
CAST	DEP1H	TEMP DEG.C	00/00 3	SIGMAT	02 UGAT/L	02 UGAT/L	AOU UGAT/L	0/0 02 SATN	P04 UGAT/L	\$104 JGAT/L	NO3 UGAT/L	N02 UGAT/L	£
7	0	26.0			537		-127		60.0		2.95	0.03	
-	8	14.7			50		777		2.13		27.26	90.0	
-4	100	13.4			25		483	•	2.25		30.53	0.02	
-	200	12.5			16		205	3	2.41		30.87	0.01	
-	372	9.6			43	0.81	509	60	2.93		25.81	0.81	
-	+2+	8.8				0.85	295	ى	3.04		27.69	1.32	
r4	472	8.0				1.61	572	0	3.18		31.03	78.0	
7	523	7.4				1.57	580	•	3.19		34.51	0.03	
~	574	6.9				2.55	586	•	3.30		35.97	00.0	
7	623	6.5				5.40	589	-	3.33		40.16	0.01	
-	1025	4.3	4 34.578						3.44		66.33	00.0	

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		161	T G THOMPSON	CRUISE 026	STATION 071	170	OBSERVED VALUES	VALUES				
2007 2007 3007 3007 3007 3007 3007 3007	22/02/68 22-1 22-1 011-15-08-08		BARO TEMP DRY TEMP WET REL HUMI	1007 236.00 79.00	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	0 0 0	MEEE LEEP LEEP LEEP LEEP LEEP LEEP LEEP	1000 1000 1000 1000 1000 1000 1000 100	SECCE	SECCHI DES 1033		
CAST	0EP1H	TEMP DES.C	SAL 0/00	٠.	02 UGAT/L	02 UGAT/L	ACU UGAT/L	0/0 5478	PC4 UGAT/L	\$104 UGAT7L	NO3 UGAT/L	MO2 UGAT/L
	0	26.84	34,034		545		-141		6.13		2.39	0.01
	52	20.90	34.539	9 24.17	199		747		1.66		17.66	1.86
	64	15.18	34.97		43		a++	حی	2.22		31.83	5.11
	66	13.34	34.988		54		485	'n	2.31		32.18	0.01
	198	12.26	34.841		18		503	3	2.39		32.55	0.02
	562	11.21	34.772			2,55		0	2.60		32.78	0.30
	348	10.42	24.731			0.47		0	2.74		30.41	0.05
	398	9.56	34.687			0.76		0	2.89		29.00	0.80
	649	8.78	34.647			0.64		٥	3.02		28.23	1.28
	167	8.15	34.638			6.46*		~	3.06		33.73	60.0
	155	7.51	34.605			2.97			3.17		35.93	00.00

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	NO2 UGAT/L	00	09	70	.23	52	603	00	00	40,	*0	80
	UGA1	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ
	NO3 UGAT/L	0.80	10.94	28.95	26.92	26.08	30.35	30.46	31.64	31.48	31.69	30.76
PER100 3 I Ing 305	\$104 UGAT/L											
WAVE PERI SECCHI SOUNDING	P04 UGAT/L	0.14	1.35	2.39	2.47	2.50	2.46	2.52	2.51	2.58	2.58	2.63
VALUES 100 12 100 30 100 30	0/0 02 SATN	128	89	~	~	7	-	0	1	7	0	•
OBSERVED VALUES WIND DIRECT 302 WANE DIRECT 302 WAVE HEIGHT 2	AOU UGAT/L	-114	183	488	200	501	515	517	518	521	\$2\$	531
0 X 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	02 UGAT/L						60.	2.42	4.50	2.93	2**2	2.51
WEATHEN 072 VISIBILITY B CLOUD AMT 1	02 UGAT/L	518	754	œ	4	10						
CRUISE 026	S I GMA T	12.05	3.80	96.5	6.16	26.28	96.9	6.41	6449	16.47	6.52	26.58
CRU S 008 - 5 23 - 50 72	••	~	~	~	~	74	~	~	~	~		~
HOMPSON BARO 1 TEMP DRY REL HUMID	SAL 0/00	33.982	34.313	34.963	34.881	34.876	34.862	34.842	34.927	34.815	34.800	34.776
5	TEMP DEG.C	26.17	21.71	14.67	13.80	13.20	12.74	12.39	12.12	11.97	11.66	11.20
23/02/68 11-20-0N 087-05-0W	DEPTH	0	52	20	72	\$	150	200	727	250	274	30\$
4545 1575 1575 1575	CAST	-	-	-		~	-	-		-	~	

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		NO2 USAT/L	90.0	0.78	0.58	0.01	00.0	0.17	0.10	0.07	0.20	1.22	1.24	76.0
		NO3 UGAT/L	2 • 42	13.93	21.99	32.81	31.64	32.06	32.30	32.41	30.10	27.41	28.31	30.50
	ER 100 1120 NG 585	\$104 UGAT/L												
	SECCHI SECCHI SOUNDING	PO4 UGAT/L	0.28	1.24	1.88	2.41	2.44	2.54	2.56	2.57	2.81	2.96	3.06	3.13
VALUES	OFFI CONTROL C	370 02 SATN	117	99	37	4	m	9	-	0	0	0	0	o
OBSERVED VALUES	EEE IND VERY FEED IN THE INTERPRETATION OF T	AOU USAT/L	99-	192	583	492	501	511	524	525	544	929	295	699
N 073	× × × × × × × × × × × × × × × × × × ×	92 UGAT/L					7.61	2.00	3.06	2.63	0.47	1.40	1.87	2.46
STATION 073	WEATHER VISIBILITY CLOUD TYPE	02 USAT/L	475	543	170	19	17	15						
CRU1SE 026	NO:0N	SIGMAT	22.50	23.71	24.86	26.26	26.40	26.50	26.50	26.51	26.71	76.84	26.90	26.98
MPSON CF	BARO 1013 TEMP DRY 28 TEMP WET 22 REL HUMID	SAL 0/00	34.257	34.319	34.683	34.862	34.852	34.804	34.796	34.791	34.728	34.664	34.650	34.623
T G THOMPSON		TEMP DEG.C	25.98	22.04	18.76	13.22	12.50	11.77	11.71	11.67	10.27	9.21	8.78	8.15
	23/02/68 16-3 12-23-0N 088-48-0W	DEP TH	0	52	64	66	149	199	546	562	349	399	674	200
	100 100 100 100 100 100 100 100 100 100	CAST	1	-	-1	1	-	-	m	-	-1	-•	-	H

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		N02 UGAT/L	0.10	0.15	0.30	0.02	00•0	0000	74.0	1.28	1.30	1.16	1.06	
		NO3 UGAT/L	3.56	8.26	29.45	31.24	31.98	32.48	28.49	27.05	27.16	29.32	32.06	25.76
	WAVE PERIOD 25 SECCHI SOUNDING 5522	\$104 UGAT/L												
	SECOND	PO4 USAT/L	0.51	08.0	2.38	2.41	2.43	2.59	2.81	2.97	3.10	3.17	3.26	75-6
VALUES	000 000 000 000 000 000 000 000 000 00	3/0 02 SATN	112	120	3	6	m	7	0	0	0	0	0	O
OBSERVED VALUES	WIND VER WAVE DIR	AOU UGAT/L	14-	-82	465	493	506	527	543	554	595	573	582	5.88
\$20 Z	>ш О:®×О	02 UGA T / L				2.21	13.60	5.95	0.55	0.59	0.59	1.15	0.72	1.57
STATION 074	WEATHER VISIBILITY CLOUD TYPE CLOUD AMT	02 UGAT/L	451	664	19	14								
CRU1SE 026	1012 265 196 196 196 196	SIGMAT	22.38	23.08	25.62	26.21	26.42	26.58	26.69	26.80	26.91	56.99	27.07	27.13
	BARO 101 TEMP DRY 2 TEMP WET 1 REL HUMID	SAL 0/00	34.344	34.468	34.789	34.884	34.853	34.767	34.720	34.671	34.636	34.605	34.587	34.580
T G THOMPSON	&	TEMP DEG.C	26.56	24.61	15.92	13.53	12.38	11.20	10.35	9.50	8.61	7,99	7.35	6.88
	24/02/68 13-01-0N 091-47-0W	ОЕРТН		25	20	100	201	302	353	403	453	505	555	609
	PACA OAOA NACA OACA	CAST	-4	~	7	-	~	-	-4	-	-	~		~

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		NO2 UGAT/L	0.05	0.21	90.0	0000	0.05	0.95	1.25	1.17	0.98	•
		NO3 UGAT/L	60.0	20.80	28.89	31.18	29.66	28.18	25.99	26.83	28.11	, ,
	WAVE PERIOD 2 SECCHI SOUNDING 4755	S104 UGAT/L										
	SECCHI SOUNDI	P04 UGAT/L	C.23	1.81	2.52	2.55	2.71	2.17	2.96	3.06	3.18	•
VALUES	0000 H 0000 E	0/0 02 SATN	109	36		2	ဝ	0	Ö	o	o	c
GESERVED VALUES	EEEE EEED ACAN CEED TOOK TOOK TOOK TOOK TOOK TOOK TOOK TOO	AOU UGAT/L	-35	567	504	517	531	537	548	557	267	27.5
N 075	≽m ∞×α	02 UGAT/L				2.34	1.66	1.53	1.32	1.27	1.10	2.66
STATION 075	WEATHER VISIBILIT CLOUD TYP CLOUD ANT	02 UGAT/L	437	163	ĸ	æ						
CRUISE 326	016.0 27.9 22.99	SIGMAT	22.21	24.61	26.21	26.46	26.57	26.63	26.75	26.84	26.93	27.02
	AARO DRY TEMP DRY TEMP KET	SAL 0700	34.291	34.468	34.843	34.799	34.765	34.741	34.691	34.652	34.616	34.586
T G THOMPSON	• • •	TEMP DEG.C	56.99	19.10	13,39	11.94	11.24	10.80	9.91	9.18	3.44	7.64
	DATE 27/02/69 HOUR 16-18-5N LAT 16-18-5N LONG 130-25-0W	DEPTH	c	20	100	201	251	302	352	403	453	503
	LONG LONG	CAST	H	1	-4	-	~	-	~4	7	7	,

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		N02 UGAT/L									
		NO3 UGAT/L	56.49	25.50	25.50	27.03	28.94	31.47	33.69	36.39	
ER100 7	SCCHI Scunding 2425	S104 UGAT/L									
Q 7.44	SCUNDI	PO4 UGAT/L	2.58	2.76	2.90	3.03	3.17	3.24	3.29	3,33	
VALUES	2000 1000 1000 1000 1000 1000 1000 1000	0/0 0/0 0/0 0/0	4	9	O	O)	O	o	~	ં	
OBSERVED VALUES	EEE IND VELOCITY OF THE TOTAL O		510								
076	× ночи	05	1,193	1.19	1.74	7.66	1901	1.78	91.0	1.10) •
STATION 076	VISIBILITY CLOUD TYPE CLOUD AYPE	02	UGAT/L	, d	•						
CRU1SE 026		FAN		26.53	79.97	26.70	79.97	26.91	27.00	27.05	27.12
	 		0/00	34.785	34.746	34.709	34.648	34.619	34.603	34.570	14.651
T G THOMPSON	MAH AMA	1	DEGE	11.53	10.89	10.28	9.26	8.58	7.88	7.30	, 11
	02/03/68 14.0 17-24.0N	132-22-0W	DEPTH	548	298	349	399	4 6 8	667	675	•
		IJ	-			_	-4	~	-4	-4	

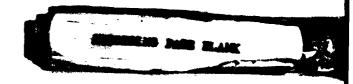
		-						
		N02 USAT/L	1.18	0.86	0.67	65.0	94.0	•
		NO3 USAT/L	25.77	26.38	28.88	31.60	32.95	
	SECCHI SOUNDING 3749	\$104 UGAT/L						
	SOUCH SOUCH	PC4 USAT/L	2.89	3.02	3.14	3.23	3.29	•
VALUES	A CONTRACT OF THE CONTRACT OF	0/0 02 SATA						
DESERVED VALUES	E SE	ACU USAT/L						
₩ 077		C2 USAT/L	0.64	1.02	1.36	1.32	6.63	
STATICA 077		92 UGAT/L						
T G THOMPSON CRUISE 026	4004	SISMAT	26.72	26.81	26.92	25.93	27.05	27.13
PAPSON CR	3ARO 1012.4 TEMP DRY 256.0 TEMP WET 71.0 REL HUMID 64	SAL 0700	34.702	34.655	34.616	34.593	34.572	34.550
1 G TH	מאשנו	TEMP DEG.C	10.12	9.37	64.8	7.99	7.36	6.03
	03/03/68 17-17- N 104-0C- W	9EPT4	303	354	*64	455	506	556
	PACAL CALCA CACA CAC	CAST		,-4	~	7	~	-

Ţ

		£	8.35	7.77	7.81	7.76		7.70		7.67	7.65	7.57	7.70	7.70	7.69	7.68
		NO2 UGAT/L	60.0	0.15	99.0	1.04	0.58	0.52	0.23	0000	00.0	0.02	0.01	0.03	0.01	00.0
		NO3 UGAT/L	1.47	23.99	26.77	26.54	26.70	28.73	31.12	34.04	34.96	42.42	38.98	37.62	38.31	37.65
WAVE PERIOD 3	CC/# 5N	\$104 UGAT/L														
SEAVE SEAVE	TONOOS	PO4 UGAT/L	0.35	2.22	2.65	2.88	3.02	3.14	3.14	3.21	3.13	3.39	2.96	2.81	2.81	2.84
VALUES OC 17	GH1 14	0/0 02 SATN	109	15	7	0	0	0	0	a	•	m	28	35	36	37
OBSERVED VALUES WIND VELOC 17	WAVE HE!	ACU UGAT/L	-37	410	507	539	553	295	570	580	584	409	477	436	430	419
8 8 8		02 UGAT/L				1.10	1.15	1.57	1601	1.53	2.38					
STATION 078	CLOUD ANT	92 UGAT/L	457	73	'n							2.1	188	232	238	247
CRUISE 026	n ⊙ • æ	SIGMAT	23.22	25.42	26.21	26.62	26.78	26.87	56.94	27.02	27.06	27.39	27.70	27.73	27.73	27.73
HOMPSON CR BARO DRY 101	101	SAL 0/00	34.483	34.569	34.768	34.696	34.649	34.610	34.578	34.543	34.540	34.548	34.646	34.665	34.668	34.675
1 6 1		TEMP DEG.C	24.18	16.06	13.09	10.64	8.52	8.77	8.14	7.43	7.13	4.52	2.10	1.91	1.92	1.99
03/03/68	105-10.	DEPTH	0	64	86	568	349	398	447	503	550	686	1982	2984	3993	4700
100 100 180 180	LONG	CAST	7	~	7	7	~	7	7	7	2	-1	~	7	-1	 4

7	NH3 UGAT/L	MEG/L	7/1CMM		
c		2.45	2.06		
64		2.44	2.26		
96		2.66	2.30		
862		2.46	2.34		
348					
398		2.49	2.34		
447					
503		2.48	2.39		
550		2.48			
686		2.52	2.48		
1982		2.57	2.43		
2984		2.57	2.43		
3990		2.56	2.46		
4700		2.57	2.43		

PRODUCTIVITY DATA



NOTE FOR PRODUCTIVITY DATA REPORT

(THOMPSON CRUISE 26)

Final Edit - January 1971

Nitrogen

The nitrogen uptake experiments were incubated 24 hours under natural light at simulated in situ intensities. The uptake rates given here represent in situ rates, which in most cases have been calculated from artificially stimulated uptake rates (MacIsaac and Dugdale, 1969; Dugdale and MacIsaac, 1971). The rates given here for all but the 12 light-penetration depth have been so calculated at all stations except Sta.36, and for nitrate uptake only at Stas. 24, 28, 32, and 34.

Carbon

The ¹⁴C productivity measurements given are light hottle values minus a constant dark bottle value. Samples were incubated for 24 hrs under natural light at simulated in situ intensities. In situations where no 1% measurement was made, zeros designated by asterisks have been entered in the report for integration purposes.

Chlorophyill-a

Chlorophvll values here are calculated according to Lorenzen (1967).

Incident Padiation

Incident radiation was measured with an Eppley pyranometer. A value marked with an asterisk is a daily value based on data from only half a day.

Chemistry

Fresh samples were used for all determinations. Nitrate analyses were made in duplicate, using the method of Wood et al. (1967); and ammonium analyses were done in triplicate according to the procedure of Procházková (1964).

Comments

The right-hand half of the first line of each station report is reserved for descriptive comments about the station or work there. Frequently the space is blank, but occasionally the entry NO₃ UPTAKE SUPPRESSION occurs. Such stations showed a suppression of nitrate uptake below expected rates, possibly due to the presence of high ammonium concentrations.

References

Dugdale, R. C., and J. J. MacIsasc. 1971. Some interactions of light and inorganic nitrogen in controlling nitrogen productivity in the sea. To be submitted for publication.

Lorenzen, C. J. 1967. Limnology and Oceanography, 12:343-346.

MacIsaac, J. J., and R. C. Dugdale. 1969. Deep-Sea Research, 16:45-57.

Procházková, L. 1964. Anal. Chem., 36:865-871.

Wood, E. D., F. A. J. Armstrong, and F. A. Richards. 1967. <u>J. Mar. Biol. Assn. U.K.</u>, 47:23-31.

Unita

Nutrient and particulate concentrations µg-At/liter
Chlorophyll and pheophytin
Carbon-14 uptake
Uptake velocities (V) day
Transport rate (RH)
Incident radiation gm-cal/cm ² /day
Integrated nutrient and particulate concentrations. mg-At/m ²
Integrated chlorophyll and pheophytin mg/m ²
Integrated carbon-14 uptake mgC/m ² /day
Integrated transport rates (RH) me-At/m ² /day

									RHN03	00.0	00000
									A I I I	00000	00000
0									č	17.96	97.0
01/10 HOUR	PERCENT 10	100 200 100		PERCENT 10	100 20 25 10		PERCENT 10	100 50 25 10	PART.C C14-UP.	00.00	00.0
LOCAL DATE 68/01/10 TOTAL RADIATION	\$104			C14-UP.			RHN03	0000	PARTOC	00.0	00.00
LOCAL	* 0		*	PART. C		:	RHNH4		PHAE0-P	00.0	00.0
	NUTRIENT DATA	0000	CARBON DATA	PHAEO-P P		NITROGEN DATA	Z	0000 •••• ••• ••• ••• •••	CHLCRO-A	1.69	70.0
117-16.0W	*** NUTR		*** CAR	CHLORO-A	0000 0000 0000 0000	*** AITR	VN03	000000000000000000000000000000000000000	\$104	0)*0	00.0
LONGITUDE 117-16.0W 80 WETERS	•		•	Ů		•	V N H 4	0000	70d	0.00	0.00
									§.	0.28	0.01
LATITUDE 29-32.0N ONE PERCENT LIGHT DEPTH	HIGSC	23. 39. 39.		DEPTH	11 23 29		DEPTH	0 11 23 39	INTEGRATION LIMITS NHA	0.0 TO 39.0 0.00	3.0 TO 39.0 0.00

MITROGEN PRODUCTIVITY CRUISE TTO26 STATION 005

					0.000 0.007	0.000 0.862		0.000 0.013	*
				g Z	35.23	36.30	71.53	0.83	
410.	PERCENT 10 100 50 25 10	PERCENT 10 100 50 25 10	PERCENT 10 100 50 25 10 1	C14=UP.	00.00	00.0		00.0	
RADIATION 410	\$ 105	C14-UP.	A 00000	PART.C	00.0	00.0	00.0	00.0	
TOTAL	* * 0	* 44 * 77 * -	Ι Ι Ι	PHAE0-P	0 0	00.0	00.0	00.0	
	70		A	CHLORO-A	2.16	04.4	6 .56	0.08	•
	¥100 710	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	61 404-C	\$015	00.0	00 0	00.0	00.0	
	-	. 3	44N	7 0d	00.0	00.0	0000	0.00	-
DEPTH	PT 11 1 2 25 25 86 25 36 42 3 42 3 42 3 42 3 42 3 42 3 42 3 4	DEРТН 112 255 462 86	7. 1. 1. 2. 2. 2. 3. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	NO3	1.68	407.64	4.9.12	4.74	
PERCENT LIGHT DEPTH	0EPTH 112 255 426	E	C	-	0.00 MEAN 0.00	TOTAL G.GC MEAS;	707AL 0-00	0000 14V±3	
ONE PERCI				ON LIMI	42.0			9.6 + C	
o				INTEGRATION LIMITS TOT	0.0 10	42.0 10	7.0 10	0.0 10	•

MITROGEN PRODUCTIVITY CRUISE TTO26 STATION 007

0.007

0.279

0.013

																	RINIA	000.0	000.0	000.0	000°C	000.0	0 C C O
	9.0																Š	18.60	77.0	90.9	0.36	34.66	0
	31/16 HOUR	• 064 2		PERCENT 10	100	25 10	; 		PERCENT 10	100	52	-		PERCENT 10	100 50 25 10	-4	C14-UP.	0.00	00.0	00*0	00.0	€ 00°0	30.0
	. DATE 68/01/16	RADIATION 490		\$104					C14-UP.					RHNO3	00000	600	PART.C	00.00	00.00	00	00.0	00.00	00.00
	LOCAL	TOTAL	:	9 0 4				:	PART. C				*	RHNHA			CHLORG-A PHAEO-P	00.0	00°C	00.0	00 • c	00.0	00.0
800 1			NUTRIENT DATA	K03	0.00	0.07 0.42	16.21	CARBON DATA	PHAE0-P				NITROGEN DATA	z a	00000 00000 00000 00000	x y • 0	CHLORG-	2 • 7 1	90.0	5.94	0.14	9.55	0.10
6 STATION DOS	103-22.0W	٧ı	*** NUTR	7 1 1				*** CAR	CHLORO-A	90.00	0.05	0.17	*** NITR	VNO3	0.0000000000000000000000000000000000000	* 610	\$104	00.0	0.00	00 • 0	0000	000	00.0
CRUISE TTC26	LONGITUDE	F6 VETERS							U					4H4	0000	•	704	00.00	00 • 0	0000	00.00	000	00.0
		T DEPTH		DEPTH	12	45 45	96		ЭЕРТН	112	25	# P		ОЕРТН	112 22 22 23 23 23 23 23 23 23 23 23 23 23	o v	NO3	76.7	5.12	365-86	g	34%-63	4.21
NITROGEN PRODUCTIVITY	16-05.0N	ONS PERCENT LIGHT		ō					ō					ŏ			TS NHA	00-0	42.0 0.00 TOTAL	00.00	0000	\(\frac{1}{2}\)	
TROGE	LATITUDE	NE PER															ON LIM!	42.0	42.0	86.0	6.98	35.0	86.2
Z	-	0															INTEGRATION LIMITS NHA	0.0 10	0.00	42.0 10	42.5 10	2.0 10	C + 0

NO SOLATION IN THE	LONGITURE 102-12-04	LOCAL DATE 68/01/22
ONE PERCENT LIGHT DEPTH 45 METERS	45 45 45 40 5	STATES OF STATES

*** NUTRIENT DATA ***

HOUR 13.0

				-140~						ŗ	· •	s.		s.	ø	O	,
										6 2 1 3	0.525	0.015	0.761	0.025	1.286	3.020	r
										RHNH4	0.476	0.014	0.163	0.005	0.643	0.010	
10	0000		01	0000-		01				ď	22.07	0.63	16.65	0.55	38.72	09•0	
PERCENT 10	100 50 25 10		PERCENT 10	100 50 25 10		PERCENT 10	100	25.00	10	C14-UP.	368.04	10.56	324.04	10.84	692.04	10.69	
\$104			C14-UP.	21000 0000 0000 0000		RHN03	0.014	0.011	0.032	PART.C	00.00	00.0	00.0	0000	0 0 • 0	00.0	
5 0 d		:	PART. C		*	4HVHA	0.026	800.0	0.0010	PHAEG-P	00°C -	00.0	00.0	00.0	0.	00.0	
803	0000 W	CARBON DATA	PHAE0-P		NITROGEN DATA	ě	0.67	96.0	0.52 0.52	CHLORG-A	4.57	0	9.30	0.31	13.07	0.21	
412	0.22	*** CA	CHLORO-A	0000	TIN ***	60r/	0.0204	0.0286	9090*	\$104	00.0	00.0	າ ວ ວ	03.0	3	5 0	
			·			4H*/				P04	00.00	60.0	0.00	00°0		0.0 5	
Į.			ı				6660.0			NO3	1.75	C+05	51.60	1.72	ún. • n ú	26.	
DEPTH	6 W N D D O O O S & S		DEPTH	10 0 32 20 35 65		DEPTH	0.5	00 %		TS NH4	7.27 MF AN	C.21 TOTAL	6.75 WEAN	0.27	14.52		
										INTEGRATION LIWITS	0.00 7.00 7.00 7.00	35.0 TO	54 C•59	65.5	65. VER	. • 5.9	
										PATION	10	10		2	C	C	
										I**TEG6	0	0 0	35.0	φ φ	•	3	*

	LOCAL DATE 68/01/24	TOTAL RADIATION 468.
NITROGEN PRODUCTIVITY CRUISE TTOZA STATION DIA	LONGITURE 099-52.0%	22 MFTEPS
NITROGEN PRODUCTIVITY	LATITURE 11-25.0N	ONE PERCENT LIGHT DEPTH 22 METERS

*** NUTRIENT DATA ***

HOUR 11.0

	-14/-		AH7.03	0.001	0.230
			RHN14 3.24	0.295	0.155 4.958 0.225
O	•	0	€ 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	5 15 40 • 86	3.71
PERCENT 10 100 25 25 10	PERCENT 10 100 50 25 10	PERCENT 10 100 50 25 110	C14-UP. 3333.04	303.04 1305.69	164.20 5138.70 233.52
\$104	C14-UP. 278.1 29C.7 307.0 326.3 2.0	NHO 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PART.C	00.00	000000000000000000000000000000000000000
7 0 a	* * * * * * * * * * * * * * * * * * *	# # # # # # # # # # # # # # # # # # #	PHAE0-P 0•00	0 0 0	0 0 0
5 00004 6 00000 70000	CARRON DATA	NITPOGEN DATA PN 5.19 5.19 5.13 2.30	CHLORO-A 31.84	2.89	2.05
00 31 00 31 00 22 00 22	*** CAR CHLORO-A 2.94 2.65 3.09 1.26	** NITP VND3 0.0002 0.0002 0.0002 0.0145	5104	000000000000000000000000000000000000000	00000
		VNH4 0.0615 0.0567 0.0546 0.0358	PO4 0•00	0.00	00.0
I 58.040	P + H = 3 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		NO3	0.02	2.49
7FPTH 0 0 111 6 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	DEPTH 0 3 11 22	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	115 NH4 TOTAL 3.13	FEAN 0.28 TOTAL 5.44	77.00 0.49 70.74L 8.58 VFAN 0.39
			11.0	11.0 f	22.0 TC 72.0 WR
			INTEGRATION LIMITS NH4 TOTAL 0.0 TO 11.0	0.0 TO 11.0 TO	0.0 TO 0.0 TO 0.0 TO

0.312 0.008 0.055 0.022 1.166 0.015

8-103

ç,																				•		0 6 0	Q•05	0+397	0.40	: - 25 9
400% 11.0			61		.	· ·	n e			0						5				ċ		•	a •	25.93	2.66	50.35
	•		PERCENT	,	č	'n		.		PERCENT		38	25 10	-		PERCENT 10	100	9. S.	O FI	9	• 6	•)) •	0 0 •	6 • •	30.0
3ATE 68/31/25	PADIATION 396		2018							C14-UP.						RHN03	0.000	0.00	0.033	0,000		, c	•	•		0
7007	TOTAL	:	9 00						:	DART. C					:	41114	0.010	0.034	0 * 950	DHAEO+P	0.0	C)		•	•	o •
		SUTPLEST DATA	503	000	40.0	40.0	3045	32.17	CARBOY DATA	PHAEC-P					ATTROGEN SATA	á	5.29	C	0.95 0.37	CHL390-4	94.9	5.17	76.9		, ,	N. 0. 1
09#-32*Cx	رط ک	*** 3079	775	6: 0	90.0	9.14	0.25		••• CAR	CHLORO-A #	80.0	0.10 0.13	4 4 4		94114 ***	V%C3	6000000	6700	• 0292	\$104	0°0°	00.0	0 0	i,	•	,
aunaliston	72 20159									Č						7Hh/.	0.0340			40	00.0	00.0	0.0	() ()	٠,	,
	7 2567L		7. 7.	c)	12	54	€/ L	n		DEPTH	0.9	77 74	39 78			75974	22			403	27.13	34.5	63.759	: 7 . 0 :	25.61	
LATITUDE 13-09.0%	11017 [33		č							S.C.						36			•	75 "H4	5.20	6100	7.06	5.25	96•71 1464	1.73
LATITUR	TT LABORD BAC																			STIMIN LIWITS	0.00	` >•6€	78.0	78.0	, 0. ar	3
																				live931%	0 0 0 0	0.0 70	C# 0.00	24 5.96	C+ 3*3	

MITADGEN PRODUCTIVITY	MITAGGEN PRODUCTIVITY CPUISE 11026 STATION 320		
LATITUDE 14-41.0%	LC1017U0F 096-51.04	LOCAL DATE 68/01/26 MOUR	201
OME DERCENT LIGHT DEPTH 52 VETERS	s severeps	TOTAL RADIATION 533.	

LOCAL DATE 68/01/26 FOUR 7-3 TOTAL RADIATION 533-		PART. C C14-UP. PERCENT IC	C Q W Q H
LOCAL DATE 68/01/26 TOTAL RADIATION 533.		C14-UP.	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
LOCAL	•	PART. C	
LC:GITUDE 096-51.0# 52 VETEPS	*** CAPACY DATA	CHLORO-A PHAED-P	0.56 0.56 0.42 0.35 0.21
14-41.0% L		3,507	C # 40 % C

01140000	ATE ATTACA SOUTH	03	9	\$104	CHLORO-A	PHAE0-P	PART.C	PART.C C14-UP.	Z Q	AINIA	RONIA
	TOTAL SEA GAGS		00.0	00	12.06	00.0	00.00	1589.14	00•0	000.0	000°C
	MEAN 0-00		0	000	94•0	00.0	00.0	61-16	0.00	00000	00000
			0.00	00.0	7.41		00.00	786.55	00.0	00000	00000
			00.0	00.0	0.29	00.0	00.00	30.30	00.0	000.0	000.0
			00.0	00.0	19.47	00.0	00.0	2375.64	00.0	0.000	0.0000
	OPO CASA DAGO		00.0	00.0	15.0	00.0	00.0	3.00 45.73	00.0	000-0	20040

																						1			0.142	1.265	0.097	2.693	0-117	•
	9.8																					å		•	4.07	9.19	3.01	06.6	3.67	
	64/01/27 HOUR			PERCENT 10	001	Š	25	91	~ 4		PERCENT 10	100	000	25	7		PERCENT 10	100	S (10		9			436.74	2802.84 3	215.64	7169.84 7	311.79	
	DATE	9ADI ATION		\$104							C14-UP.	439.8	439.8	439.8	6.9		RHNO3	0.929	6660	0.790	0.040	1040			00.0	0.00	00.00	0 0	00.0	
	LOCAL	TOTAL	:	4 C d						:	PART. C					i	RHNH4	. 14	519	20100		0 0 0		2	00.0	00.0	00.0	00.0	00.0	
N 024			NUTRIENT DATA	MC3	2.70	2 × 3	3.04	3.29	7.09	CARBON DATA	PHAE0-P					HITROGEN DATA	† d	3.83	4.20	\$ 60 60 00 7 10 10	2.46	0			4.05	38.51	2.97	40.09	3.44	
A STATION	NO-21-560	vo	*** NUTR	4 4 4	90.0	36.0	0.15	0.29		*** CAR	CHLORO-A	5.49	4.12	3.04	2.70	*** MITR	VNG3	1.2426	.2369	0.2213	.0163	7013		•	0000	00.0	0.00	00°0	0.00	•
CPUISE TTO26	LONGITUDE	23 WFTERS									U						VNH4			0.0545		ò		•	0 • 00	00.0	00.00	0°00	00.0	
		DEP 1H		<u> </u>	•	> e	۰ ۰۰	0	€		ī	c	· en ·	. C	, m		ī			15 0.0		Š	76.06	24.62	2.99	67.47	5.19	97.23	66.7	
PRODUCTIVITY	LATITUDE 16-00.0N			ОЕРТН					2		DEPTH			-	• 0		DEPTH			1	8	4	OTAL	EAN	0.25 TOTAL	3.77	9.29	6.25	2.27	
HITROGEN PRODUC	ATITUDE	CNE PERCENT LIGHT																				1			10.0 C	23.0	23.0	23.0	23.0	
T.	L	O																					101AL 1010	2	0.0	10.0 10	13.6 10	9.0 10	0.0 10	•

																						21.03	5.657	3.377	3 77.	•	77.	92**B	0.22%
																						41714	2.389	0.159		• 7			0-112
HOUR 13.8			01						0							0					i	ź	50.07	3.34	32.12				2.52
	511.		PERCENT	100	20	25	2 4		PERCENT 1		100	0 0 10	20	-		PERCENT 1		9 0	25	34			382.94	225.57	821.74	37.00	· 4		113.60
DATE 68/01/29			\$104						C14-UP.		214.8	293.0	73.9	10		ROWHR	2,4371	26400	0.384 40000	0.000	,		0.00	00.0	00.00	00.00	()		0000
LOCAL	TOTAL	:	b 04					:	PART. C						:	A TE	0.213	0,160	0.152	4 60	0 1 4 1		00.00	00.0	20.0	00.0	0		0.00
		NUTRIENT DATA	803	0.92	1012	11.94	34.50	CARBON DATA	PHAEC-P						MITROGEN DATA	ž	670	.72	3.83 1.87	ن ا	4-0a0-W		13.97	0.93	11.000	0.54	25.03	,	
093-30.0%	res Ses	*** NUTR	412	0.33	77.0	0.32	0.38	*** CARR	CHLORO-A P	60.0	0.62	1.19	0.96		*** WITRO	VNO3	0.1062	0.1322	0.1007	3.0475	\$104		00°0	0.00) • •	0.00	3	(00.0
LONGITURE	37 VETERS															4HF /			0.0692		7 00		00 • 0	00.0	€0 • 1	30°C	ò •		
	T 9857H		DFPTH	O A	۰ ۰	15	37		neptu	C	, No.	6 ;	15 37			DEDTH			15		80g		46.91	30 64 64	510.04	23.22	55.7.75	15.00	,
LATITUDE 13-58.CM	ONE PERCENT LIGHT DEPTH		6						č							ů.					AH' STIME	401 4 1	NE 4:	1200 0025 TOTAL	37.00 7.7.2 WFAN	95.00 Je	3705 11042	0.00	
LAT	ONE																				INTEGRATION LIMITS NHA					15.5 TO 37.6	0.0 10 37	3.5 70 37.0	

	NI TROGE	NITROGEN PRODUCTIV	VIIV	CRU1SE 11026	11026	STATION	N 028	NO3 UPTAKE		SUPPRESSION			
	LATITUD	LATITUDE 13-02.0N	-	LONGITUDE		091-49.0W		LOCAL	DATE	68/01/30 H	HOUR 9.2		
	ONE PFR	ONE PFRCENT LIGHT	DEPTH	9	WETERS			TOTAL	RADIATION	N 612.			
					*		NUTRIENT DATA	•					
		DEP	HTG		Ž	NH4	NO3	P04	2018	PERCENT	01		
			0		4	1.01	1.09			100			
			٥.		0 -	0.93	1.00			8 2			
		• •	22		•	643	1.00			101			
		Φ	S		Ö	• 50	31.63			~			
					*		CARBON DATA	* * *					
		DEP	HTH		H.	CHLORO-A F	PHAE0-P	PART. C	C14-UP.	PERCENT 1	01		
			0		Ó	•21			23.8	100	_		
		•	0		00	0.24			26.6	50			
		⊢ (7	2 9		o c	979			33.0	62			
		n v0	, Š		οÓ	0.18			0	7	_		
					*		NITROGEN DATA	*					
		DEP	ьтн	4HN>	>	VN03	Z Q	RHNH4	RHN03	PERCENT	10		
				0.1370	0 0	155	1.27	0.174	0.020	100			
		- F	18 30	0.1430	0.0067	148	1.06	0.152	0.016	25			
		•		0.0379	0 0	197	94.0	0.017	0.018	, 1			
I NTEGRI	INTEGRATION LIMITS NHA	175 NH4	NO3		P04	\$104	CHLORO-A	PHAE0-0	PART .C	C14-UP.	ğ	RINIE	_
0.0 10		34.83	39.54		00.00	00.00	6.97	00.0	00.0	853.84	41.44	5.293	_
0.0 10		1.16	1.3	~	00.00	00.0	0.23	00.0	00.0	28.50	1.38	0.176	
30.0 TO		60.0 28.95	489.45		00.00	00.0	5.55	00.0	00.0	405.04	26.55	2.820	_
30.0 10		0.96	16.31		00.00	00.00	0.18	00.0	00•0	13.44	0.88	760.0	
0.0		63.78	658.99		00.0	00•0	12.52	00.0	0000	1255.84	64.49	0.113	
0.0	40.0	1.06	9.02		00.0	0.00	0.21	00.0	00.0	20.97	1.13	C-135	-

RHNC3 0.491 0.527 0.527 1.019

THOSE PRODUCTIVITY CRUISF TTO26 STATICN 030 LOCAL DAT REPERCENT LIGHT DEDTH 46 WETERS TOTAL RAF O 0.33																						_						
FPTH CRUITSE TIOZ6 STATION 030 NH LONGITUDE 093-24.0W LOCAL DATE 68/C1/31 HOUSE T DEPTH 46 WETERS TO 0.00 0.33 0.004 0.20 0.217 0.004 0.20 0.218 0.009 0.31 0.006 0.31 0.006 0.31 0.006 0.31 0.006 0.31 0.006 0.31 0.006 0.31 0.006 0.31 0.006 0.31 0.006 0.31 0.006 0.31 0.006 0.31 0.006 0.31 0.006 0.31 0.006 0.32 0.002 0.30 0.002 0.30 0.00 0.00 0.00 0.00 0.00 0.00 0.30 0.00 0.0																						RINIE	2.123	0.112	1.243	9*0*0	3.365	6.073
FPTH CRUISE TIOZG STATION 030 NUMBERS TOEDTH 46 METERS *** NUTRIENT DATA *** FPTH NUMBERS *** NUTRIENT DATA *** FPTH NUMBERS *** CARBON DATA *** CHURGA-A PHAEG-P PART. C CI4-UP. PERCENT 10 0.31 4.0.232 0.324 6.0.31 6.0.34 6.		~,									•											z	44.5	1.29	87.00	1.14	55.22	1.20
FPTH CRUISE TTO26 STATION 030 NN LONGITUDE 093-24.0W T DEDTH 46 METERS *** NUTRIENT DATA *** *** NUTRIENT DATA *** *** NUTRIENT DATA *** *** NUTROGEN DATA *** EPTH CHLORO-A PHAEO-P PARI 0 0.31 0 0.031 0 0.031 0 0.034 0 0.036 0 0.036 0 0.035 0 0.036 0 0.037			482.		PERCENT 10	120	25	ŏ.			PERCENT 10	100	50 0 5	9	-		PERCENT 10	100	000	10,		C14-UP.		00.0		0.00		00°0
FPTH CRUISE TTO26 STATION 030 NN LONGITUDE 093-24.0W T DEDTH 46 METERS *** NUTRIENT DATA *** *** NUTRIENT DATA *** *** NUTRIENT DATA *** *** NUTROGEN DATA *** EPTH CHLORO-A PHAEO-P PARI 0 0.31 0 0.031 0 0.031 0 0.034 0 0.036 0 0.036 0 0.035 0 0.036 0 0.037		DATE 68/0	RACIATION		\$018						C14-UP.						RHN03	0.015	0.015	0.034	210.0	PART.C	00.0	00.0	00.00	00.0	00.0	00.00
FOUTY CRUISF TT026 STATION 030 NA LONGITUDE 093-24.0W T DEPTH 46 METERS SETH A6 METERS SETH NO3 SETH		LOCAL	TOTAL	*	P04					:						* *	RHNHA	04132	0.143	0.104		PHAEO-P	00.0	00.0	00.0	00.0	00°C	0.00
FPTH CRUISF TTO26 STA NO LONGITUDE 093-27 FPTH 46 METERS 19 CPTH 46 METERS 19 CPTH 00-23 EPTH NH4 VNO3 19 CPTH VNH4 VNO3 19 CPTH 00-1232 00-024 CPTH 0	030			ENT DATA	NO3	70.0	90.0	60.0	80.0	ON DATA						DGEN DATA	Ž d	~	1.16	1.65 0.95	1.33	CHLORO-A	6.65	0.35	11.61	0.43	18.26	0
EPTH 46 METER 19 46 46 46 46 46 46 46 46 47 19 46 46 46 46 47 19 46 46 46 46 46 46 46 47 19 46 46 46 46 47 46 46 46 46 46 46 47 46 46 46 46 46 46 46 46 46 46 46 46 46		793-24.0W	40		4IX	0.33	0.27	0.20				0.31	94.0	0.34 0.34	0.52		V.NO3	0.00	.0128	0.0204	.0089	\$104	0.00	0.00	0.00	00.0		00.0
EPTH EPTH EPTH CO 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UISF TT02(46 METER	·							U						4 H V V					4 04						00°0
INTEGRATION LIMITS NM4 0.0 TO 19.0 MFAN 0.0 TO 19.0 MFAN 0.0 TO 19.0 MFAN 19.0 TO 45.0 MFAN 19.0 TO 45.0 MFAN 10.0 TO 45.	ITY		ОЕРТН		H	o	.	. 6	9		111	c	•	æ 9	9 9		PTH					NOS	1.18				٠,	0.08
INTEGRATION LIMI 0.0 TO 19.0 19.0 TO 46.0 10.0 TO 46.0	PRODUCTIV	10-53.0N	NT LIGHT		DEF				. •		DE						ņĒ					TS NH&	TOTAL 3.96	MFAN: 0.21	TOTAL 5.40	WFAN 0.20	1CTAL 9.34	WFA1.
NINTEGRATIE 0.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0	TROGEN	TITUDE	E PERCE																			ON LIMI	19.0	19.0	45.0	6.64	4 0	, 0.44
	1 Z	5	NO.																			INTEGRATIO	0.0 10	0.0	19.0 10	19.0 10	3.0 10	0 0 0

Z	17 TROGEN	NITROGEN PRODUCTIVITY	-	CRU1SE 11026	26 STATION	IN 032	NO3 UPTAKE		SUPPRESSION			
_	LATITUDE	NO-88-60		LONGITUNE	093-25.0W		LOCAL	DATE 68	68/02/01 HG	HOUR 10.C		
D	NE PERCI	ONE PERCENT LIGHT DEPTH	DEPTH	Se weters	S)		TOTAL	RADIATION	ON 546.			
					*** NUTR	NUTRIENT DATA	:					
		DE	ОЕРТН		414	¥03	b 04	\$104	PERCENT 1	0		
			O 0		94.0	0.33			100			
			71		0.58	0.31			22			
		- -	. eo		90	21.99			7 "			
					*** CAR	CARBON DATA	*					
		DE	DEPTH		CHLORO-A	PHAE0-P	PART. C	C14-UP.	PERCENT 1	0		
			c		0.14			25.5	100			
			9		0.32			54.4	2 20			
		· च च	29		0.10			*0	01			134-
		•	2		•			•	•			
					*** NITR	NITROGEN DATA	:					
		136	ЭЕРТН	4HN >	VNO3	Z.	RHZH4	RHN03	PERCENT 1	0		
			0 6	0.0846	0.0318	1.09	0.092	0.035	100			
		~			0.0183	1.27	0.123	0.023	2 2			
			5 9 5 9	0.0881 0.0255	0.0302 0.0472	0.00	0.085	0.029	10			
INTEGRATION LIWITS NHA	ON LIMI	TS NH4	NO3	9 0 d	\$104	CHLORG-A	PHAE0-P	PARTOC	C14-UP.	ğ	RINI 1	RINOS
0.0 10	29.0	16-92	21.60	00.00	00.00	10.95	00.0	00.00	1433.25	36.68	3.166	0.876
0.0 10	20.62	0.54	0.74	00•0	00.0	0.38	00.0	00.0	49.47	1.26	901.0	0.030
29.0 10	28.0	101AL 14.50	354.73	3 0.00	0000	12.18	00.0	00.00	616.44	22.18	1.446	808.0
29.0 10	, C	0.50	12-21	1 0.00	0.00	0.42	00.0	0000	21.30	97.0	0.050	0.028
0.0 10	50.0	31.32	275.R4	00.00	0°00	23.13	0.00	00.0	2047.64	58.87	4.612	1.584
0.0 10	6.98	9500	44.9	00.00		04.0	00.0	00.0	35.38	1.01	0.000	620.0
•					•						•	•

			RHNOW	5.474	2.450	20:07	7.924
			R H N H S H	4.372	2.463	0.107	6.836
° • • • • • • • • • • • • • • • • • • •			Z Q	5.36 2.83	16*6	2.17	95.27
HOUR 100 50 55 25 10 1 1	1022	NT 10 100 50 25 10 1		4	4		
iai tai		PERCENT 10 100 50 25 10	C14-UP.	1481.44	96.566	43.34	2477-34 53-57
- L	112.4 95.9 82.9 9.0 7.0	RH NO 00 00 00 00 00 00 00 00 00 00 00 00 00	PART.C	0000	00.0	00•0	00.00
LOCAL *** PO4 ***	*	RHNH4 0.413 0.237 0.275 0.214	g.	00.0	00•0	00•0	00.0
5.0W NUTRIENT DATA N03 9.17 9.21 9.30 9.96 18.16 CARBON DATA	NITROGEN DATA	W W W W W W W W W W W W W W W W W W W	CHLORO-A	0.78	14.95	0.65	27.42
91-1 91-1 91-1 91-1 91-1 91-1 91-1 91-1 91-1	0.77 0.80 0.74 0.56 ***	VNO3 0.1144 0.1500 0.1317 0.0587	5104	00.0	00.0	00.0	00.0
39 MFTERS.		VMH4 0.1040 0.0970 0.0966 0.0850	PO4	00.0	00*0	000	00.0
	r 11 16 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NO3	9.38	323.38	14.06	12-14
09-56		9	TS NH4 TOTAL 10-06	MFAN 0.63	16.56 WEAN	0.72 TOTAL	
CATITUDE ONF PERCE			N LIMIT	16.0	30.00	39.0	39.0
J Ō			INTEGRATION LIMITS NH4 TOTAL 0.0 TO 16.0 10.0	0.0 10	16.0 10	16.0 10	0.00

NITROGEN PRODUCTIVITY CRUISE TT026 STATION 034

2.057

0.1%

5.09

0.0 TO

																						RHN03	1.682	29095	1.952	0.072		***	5.057
																						RIZIE	3.867	0.143	3.936	0.146	7.	708	0.14
	HOUR 11.8			01	0	O #		-		01	•		•	0 ~			0					ď	53.87	2.00	58.86	2.18	112.74		5.09
PPRESSICN		•		PERCENT 10	10		12.			PERCENT 1		00	Zi.	10			PERCENT 10			53	10	C14-UP.	00.0	00.0	00.0	00.0	00.0		0.0
NOS UPTAKE SUPPRESSION	IL DATE 68/02/03	L RADIATION 626.		\$104						C14-UP.							RHN03	680.0	0.067	0.040	990.0	PART.C	00.0	00.00	00.0	00.0	00.0	•	00.00
604	LOCAL	TOTAL	•	P04					:	PART. C						•	RHNH4	0.144	0.128	0.116	0.081	N PHAEO-P	00.0	00.0	00.0	00.0	00.0	6	00.0
ON 036	•		NUTRIENT DATA	N03	16.15	16.09	15.61		CARBON DATA	PHAE0-P					4 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ALEA MACO	Z Z	1.99	1.85	1.81	1.83	CHLORO-A	6909	0.25	8 • 2 3	0.30	14.96	6	97.0
26 STATION	089-26.0W	RS	*** NUT	A I	84.0	0.45	0.45	?	*** CA!	CHLORO-A	0.20	0.19	80.00	0.31	444		VNO3	0.0419	0.0361	0.0222	.0360	\$104	00.0	00.0	0.00	00.0	00.00	0	•
CRUISE 11026	LONGITUDE	S4 METERS															VNH4		0.0692			5 04	00.0	00.00	00.00	00.0	00.0	00.0) •
		17 DEPTH		DEPTH	0 📾	91	27 54			ОЕРТН	0	€ ;	10 72	1			DEPTH	0		27		K0 60	431.79	15.99	99.409	72.39	1036.45	19,19	•
NITROGEN PRODUCTIVITY	DE 10-06.0N	ONE PERCENT LIGHT DEPTH								6							٥					TOTAL	12.35 MFAN	7074	12.2A	0.45	24.63	946))
N 1 7 ROGE	LATITUDE	ONE PER																					27.0	27.0	54.0	94.0	94.0	54.0)
-	-	•																				INTEGRATION LIMITS	0.0 10	0.0 13	27.0 10	27.0 TO	0.0 10	0.0 10	•

		AHNU3 1.334 0.148 1.276 0.116 2.609
		# C O O O O C
100 100 100 100 100 100 100 100 100 100	<u>0</u> 0000	PN 99 98 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
# BMT 220.	PERCENT 10 100 50 50 10 100 100 50 50 50 50 10	C14-11P. 2488.09 276.49 1144.C4 104.C4 1632.09
L BATF 68/02/04 L RADIATION 511 SIO4 PERC	C14-UP. 213-5 400.00 257-8 197-2 10.8 RHN03 0.172 0.172 0.165	A 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	A # # # # # # # # # # # # # # # # # # #	CHLORO-A PHAEO-0 44.36 0.00 4.93 0.00 55.77 0.00 5.07 0.00 100.13 0.00
5.0W NUTRIENT DATA NO3 0.12 0.11 0.10 0.10 0.10 0.10 0.10 0.10	0-A PMAEO-P NITROGEN DATA 4.32 4.66 4.15 4.40	CHLORO-4 44.36 4.93 55.77 5.07 100.13
ST - 88 -1	11	0.00 0.00 0.00 0.00 0.00
CRUISE TTO26 LONGITUDE OF ROWETERS	O O O O O	4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	2 C	NO3 0.93 0.10 7.66 1.57
NITROGEN PRODUCTIVITY LATITUDE 10-04.CM ONE PERCENT LIGHT DEPTH DEPTH 20 20	ë ë	1 LIMITS NH4 10TAL 9.0 0.00 9.0 WEAN 70.0 MEAN 70.0 TOTAL 70.0 FAN 70.0 7.00
NI TROGE LATITUD ONE PER		ON LIMI 9.0 70.0 70.0 70.0
		INTEGRATION LIMITS NH4 0.0 TO 9.0 TO 0.00 0.0 TO 9.0 TOTAL 9.0 TO 20.0 PFAN 0.0 TO 20.0 D.00

LOCAL DATE 68/02/11 HOUR 14.6 CRUISE TTO26 STATION 041 LONGITUDE 087-50.0W NITROGEN PRODUCTIVITY LATITUDE 08-54.0N ONE PERCENT

Z.		PERCENT 10	001	20	52	10	-
TOTAL RADIATION		C14-UP.	39.8	65.5	19.2		0.7
TOTAL	:	PART. C					
	*** CARBON DATA	CHLORO-A PHAEO-P PART. C C14-UP.					
47 METERS	*** CAR	CHLORO-A	0.18	0.32	0.57	0.51	90•0
T LIGHT DEPTH		DEPTH	0	٥	16	**	1.4

Ę.	INTEGRATION LIMITS NHA	1	N03	P04	\$0.18	CHLORO-A	CHLORG-A PHAEG-P	PART.C	PART.C C14-UP.	Š	RHNH4	RHNOS
7	0.0 TO 24.0 0.00	00.0	00.00	30.0	00.00	89.6	0.00	00.0	904.85	00.0	000.0	00000
0.0 10 2	24.0 0.00 TOTAL	00.0	00.00	00.0	00.00	0**0	00.0	00.0	37.75	00.0	00000	0.000
24.0 10 4	47.0 0.00	00.0	00.00	00.00	00.00	6.55	00.0	00.0	173.99	00.0	000•0	0.000
24.0 10 4	47.0 0.00	00.00	00.00	00.0	00.00	0.28	00.0	00.0	7.61	00.0	00000	00000
0.0 TO 4	47.0 0.00	00.0	00.00	00.0	00.0	16.24	0.00	00.0	1078.79	0.00	000•0	000°C
4	0.0 10 47.0 0.00	00.0	00.00	00.00	0.00	0.35	00.0	00.00	23.00	0.00	00000	0000

MITPOGEN PRODUCTIVITY	Y CRUISF 11026 STATION 050		
LATITUDE 08-55.0%	LONGITUDE 089-34.0W	LOCAL DATE 68/02/14 HOUR 17	HOUR 17
ONE PERCENT LIGHT DEPTH 62 VFTERS	62 VFTERS	TOTAL RADIATION	

OCAL DATE 68/02/14 HOUR 17.6)IATION		UP. PERCENT 10
LOCAL DA	TOTAL RADIATION	:	ART. C C1
089-34.0%	S 2	*** CARBON DATA	CHLORO-A PHAEG-P PART, C C14-UP. PERCENT 10
LONGITUDE 089-34.0W	62 VFTES		J
E 08-55-04	CENT LIGHT DEPTH 62 WFTERS		DEPTH

120 25 10 10

142.9 122.8 76.2 2.2

0.33 0.39 0.47 0.47

32 32 52 52

INTEGRATION LIMITS NHA	ON LIMI	TS NH4	NO3	P04	\$104	CHLORO-A	PHAE0-P	PART.C	PART.C C14-UP.	Z	PHYLL	RHNO3
0.0 10 32.0	32.0	00.00	00.0	00.00	00.00	13.47	00.0	00.0	3144.44	00.0	000.0	00000
0.0 10	32.0	32.0 0.00	00.00	00.0	00.0	0.42	00.0	00.0	98.31	0.00	0.000	00000
32.0 10		62.0 0.00	00.00	00.0	00.0	10.50	00.0	0.00	858.90	00.0	000•0	000 • 0
32.0 TO		62-0 0-00	00.00	00.00	00.00	0.35	00.0	00.0	28.67	00.0	000.0	000.0
0.0 0.0	62.0	62.0 0.00	00.0	00.00	00.0	23.97	00.0	00.0	4003.29	00.0	000.0	000-0
0.0	62.0	0.0 TO 62.0 0.00	000	00.00	00.0	0.30	00.0	00.00	0.00 66.61	00.0	0000	0000

MITROGEN PRODUCTIVITY CRUISE TTO26 STATION 057

LOCAL DATE 68/02/17 LONGITUDE 088-50.0W LATITUDE 08-53.0N ONF PERC

HOUR 11.8					
10 10 10			10	100 100 100 100	
02/17	Z		PERCENT 10	Ä	
LOCAL DATE 68/02/17	TOTAL RADIATION		C14-UP.	181.8 211.4 78.9 67.0	
LOCAL	TOTAL		PART. C		
		:	PARI		
3		*** CARBON DATA	CHLORO-A PHAEO-P		
098-20	S)	V	CHLORO-A	0000 0000 0000 0000 0000	
LONGITUDE 088-50.0M	32 METERS				
	DEPTH		Ŧ	04#40	
NE 08-53.0N	RCENT LIGHT DEPTH		DEPTH	 €	
90	CENT				

RHN03	00000					00000
RIZIA	0.00	000•0	00000	000•0	000•0	000•0
ď	00.0	00.0	00.0	00.00	00.0	0.00
PART.C C14-UP.	1804.74	128.95		33.94		75.51
	0000	0.0	00.00	00.0	00.00	00.0
CHLORO-A PHAEO-P	00.00	00.0	00.0	00•0	00.0	00.00
CHLORO		0.80	12.42	69•0	23.58	0.74
8104	00.0	00.00	00.00	00.00	00.00	00.00
90 d	00.0	00.00	00.0	00.00	00.00	00.00
NO3	00•0	00•0	00.0	00•0	00.0	00.0
INTEGRATION LIMITS NHA	14.0 0.00	14.0 0.00 TOTAL	32.0 0.00	32.0 0.00 TOTAL	32.0 0.00	
ION LIM	14.0					32.0
GRAT	0.0 10	0.0	14.0 70	14.0 10	0.0 10	0.0 10
INTE	0	0	16.(14.6	0	0

NITROGEN PRODUCTIVITY CRUISE TTO26 STATION 062

LOCAL DATE 68/02/19 HOUR 16.6	TOTAL RADIATION
LONGITUDF 089-26.0W	37 METERS
LATITUDE 08-34.0%	ONE PERCENT LIGHT DEPTH 37 METERS

			10	0	0	15	10	
	z		PERCENT	10	20	7	Ä	
100	TOTAL RADIATION		C14-UP.	41.5	61.7	61.5	39.5	30.0
	JAL		U					
í	1	:	PART.					
B		CARBON DATA	CHLORO-A PHAEO-P PART. C C14-UP. PERCENT 10					
			4- 0	4		6	•	2
	SS	*	HLOG	0	0	0	0.68	-
LUMB 1001 001-2010	37 METERS		ŭ					
	LIGHT DEPTH		DEPTH	0	^	12	61	47

•	_	-:	161-	_	_	_
RHN03	00000	0.00	00000	000•0	00000	0000
RHNHA	000•0	000•0	000•0	000•0	000•0	000
ğ	00.0	00.0	00•0	00.0	0 • 0	
. C14-UP.	1022.74	53.87	534.64	0.00 29.74	1557.34	42.13
PART .C		0.00	0.00	00.0	00•0	00.00
CHLORO-A PHAEO-P PART.C C14-UP.		00.00	00.00	00.00	00•0	00.0
CHLORO-	10.53	0.55	15.30	0.85	25.83	
\$104	00.00	00.00	00.0	00.0	00.0	00.0
404	0.00	00.0	00.0	0000	00.0	00.00
NO3	0.00	00•0	00•0	00.0	00.0	00.0
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This report contains the tabulated physical, chemical and biological data obtained in the northeastern tropical Pacific Ocean during January, February, and March 1968 during Cruise 026 of RV Thomas G. Thompson. Designated PONCHO, the cruise was undertaken to investigate the effects of chemical properties on biological and physical processes in a nutrient rich area. The various observations, and methods of collection, and analyses are described.

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